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No. 15057

United States
Court of Appeals
for the Ninth Circuit

MOIST COLD REFRIGERATOR CO., INC., a Corporation,

Appellant,

vs.

LOU JOHNSON CO., INC., a Corporation; MEIER & FRANK COMPANY, INC., a Corporation; ADMIRAL CORPORATION, a Corporation, and AMANA REFRIGERATION, INC., a Corporation,

Appellees.

Transcript of Record
In Four Volumes

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Volume I
(Pages 1 to 408)

Appeal from the United States District Court for the District of Oregon

Phillips & Van Orden Co., 870 Brannan Street, San Francisco, Calif.—6-29-56

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[Clerk's Note: When deemed likely to be of an important nature, errors or doubtful matters appearing in the original certified record are printed literally in italic; and, likewise, cancelled matter appearing in the original certified record is printed and cancelled herein accordingly. When possible, an omission from the text is indicated by printing in italic the two words between which the omission seems to occur.]

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For Amana Corporation;
Appellees.

In the United States District Court
For the District of Oregon

Civil Action No. 6016

MOIST COLD REFRIGERATOR CO., INC., an Oregon Corporation,

Plaintiff,

vs.

LOU JOHNSON CO., INC., an Oregon Corporation, and MEIER & FRANK COMPANY, INC., an Oregon Corporation,

Defendants.

COMPLAINT

Suit for Infringement of United States Letters Patent RE. 23,058

Plaintiff, Moist Cold Refrigerator Co., Inc., complaining of defendants, alleges:

I.

This is an action for infringement by defendants of Letters Patent owned by plaintiff and arises under the Patent Laws of the United States.

II.

Plaintiff, Moist Cold Refrigerator Co., Inc., an Oregon corporation, is the owner of Reissue Letters Patent No. 23,058, dated December 14, 1948.

III.

Defendant, Lou Johnson Co., Inc., an Oregon corporation, since prior to the date of said patent has infringed and is infringing the same by selling

and using household refrigerators embodying the inventions of said patent, and particularly those refrigerators identified by the following manufacturer's designations, Model FR-9, Model FR-9-A and Model FR-9-S of Amana Refrigeration, Inc.; Model No. 1090 and Model No. 1390 of Admiral Corporation.

IV.

Defendant, Meier & Frank Company, Inc., an Oregon corporation, has subsequent to the date of said patent infringed and is infringing same by selling and using household refrigerators embodying the inventions of said patent, and particularly those refrigerators identified by the following manufacturer's designations, Model FR-9 and Model FR-9-A of Amana Refrigeration, Inc.; Model No. 1090 and Model No. 1390 of Admiral Corporation.

V.

Both defendants Lou Johnson Co., Inc., and Meier & Frank Company, Inc., have been notified of the infringement complained above by notices in writing.

VI.

Letters Patent RE. No. 23,058 was duly reissued to Refrigeration Patents Corporation, a New York corporation, and was duly assigned by mesne assignments to the plaintiff, said assignments being duly recorded in the United States Patent Office, and plaintiff is now the owner of the entire right to sue and recover damages for all past infringements thereof.

VII.

The aforesaid infringement by defendants has been within the District of Oregon, and plaintiff has no knowledge or information sufficient to form a belief as to whether Amana Refrigeration, Inc., and Admiral Corporation, or either of them, has manufactured, used or sold within said District such household refrigerators nor whether either of said manufacturer-suppliers has an established place of business within said District. Plaintiff invites either or both of said manufacturer-suppliers to join as party or parties defendant in this action, and to submit for adjudication herein any and all models of household refrigerators which they desire.

Wherefore, plaintiff demands judgment against the named defendants and against any additional party or parties defendant in an amount equal to ten per cent (10%) of the manufacturer's sale price for each and every infringing household refrigerator manufactured, used or sold by them with interest thereon, and that the damages when ascertained be trebled by reason of the willful character of said infringement together with an assessment of costs in favor of plaintiff including a reasonable attorney fee.

Plaintiff demands trial by jury of the issues in this action.

MOIST COLD
REFRIGERATOR CO., INC.,

By BUCKHORN AND
CHEATHAM,

/s/ O. E. CHEATHAM,
Of Counsel for Plaintiff.

[Endorsed]: Filed April 23, 1951.

[Title of District Court and Cause.]

INTERVENER'S ANSWER

Admiral Corporation, a Delaware Corporation, having its principal place of business at Chicago, Illinois, as intervener herein, for its answer to the complaint.

1. Admits the allegations of paragraph 1 that this action arises under the Patent Laws of the United States but has no information as to plaintiff's title to said patent in suit and, therefore, leaves plaintiff to its proof.

2. Has no knowledge of the allegation of paragraph 2, and therefore leaves plaintiff to its proof.

3. Denies the allegations of paragraph 3 with respect to defendant's infringement of said patent by the sale and use of household refrigerators, Model No. 1090 and Model No. 1390, manufactured by Ad-

miral Corporation. Intervener has no knowledge of the remaining allegations of paragraph 3.

4. Denies the allegations of paragraph 4 with respect to defendant's infringement of said patent by the sale and use of household refrigerators, Model No. 1090 and Model No. 1390, manufactured by Admiral Corporation. Intervener has no knowledge of the remaining allegations of paragraph 4.

5. Admits the allegations of Paragraph 5.

6. Admits that reissue patent Re. 23,058 was issued, as alleged in Paragraph 6, but denies that it was duly and lawfully issued. Intervener has no information as to plaintiff's title to said patent, and therefore, leaves plaintiff to its proof.

7. Denies the allegation of Paragraph 7 with respect to infringement but admits that it has no established place of business within the district of Oregon, and alleges it has a regular, established place of business in Chicago, Illinois.

8. Answering further, intervener avers that no household refrigerator, including Model No. 1090 and/or Model No. 1390, manufactured, used or sold by it infringes any claim of said Letters Patent Re. 23,058; and that the claims of said Letters Patent are so limited in terms and in light of the prior art and by virtue of limitations and interpretations necessarily placed upon them during the prosecution of the applications therefor in the Patent Office as to

render them ineffective in scope to cover any refrigerator manufactured, used or sold by intervener, and plaintiff is estopped by the proceedings of the Patent Office in connection with the prosecution of the applications for said Letters Patent to assert that any household refrigerator manufactured, used, or sold by intervener constitutes an infringement of any of the claims thereof.

9. Intervener, upon information and belief, avers that said Letters Patent Re. 23,058 and the claims thereof are invalid and of no force and effect in law on the following grounds:

(a) The alleged invention, set forth and claimed therein, and all substantial and material parts thereof, were described in patents, granted, filed or published, prior to the alleged invention thereof by Bronaugh and Potter, or more than two years prior to the filing date of the application for the original Letters Patent on which the said Reissue is based, said patents including the following, among others:

United States Letters Patent

Number and Patentee:	Date
697,029—Wm. F. Singer	April 8, 1902
1,324,868—Fred W. Wolf	December 16, 1919
1,371,235—George A. Gase	March 15, 1921
1,422,886—P. R. Owens	July 18, 1922
1,439,051—August P. Anderson	December 19, 1922

1,515,165—Earl P. Oswald .....November 11, 1924
1,541,797—French E. Dennison .....June 16, 1925
1,601,445—G. Hilger .....September 28, 1926
Re. 17,078—Ransom W. Davenport...Sept. 11, 1928
1,706,891—A. J. Kusel, et al. .....March 26, 1929
1,726,344—Ransom W. Davenport..August 27, 1929
1,731,711—Ransom W. Davenport....Oct. 15, 1929
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Walter C. Marshall .....March 4, 1930
1,769,118—Ransom W. Davenport ....July 1, 1930
1,776,235—L. C. Larkin ..... September 16, 1930
1,798,951—Carl Georg Munters ....March 31, 1931
1,985,252—C. F. Henney .....December 25, 1934

(b) The subject matter described and claimed in said Letters Patent Re. 23,058, was, in all essential features old and well known prior to the alleged invention thereof by said Bronaugh and Potter, and did not involve any patentable invention whatsoever, but only mere mechanical skill in the selection and adaptation of elements, materials and devices well known in the art.

(c) Said Letters Patent is not in such full, clear, concise and exact terms as required by the statutes of the United States to enable any person skilled in the art or science to which they appertain or with which they are most nearly connected to make, employ or use the same.

(d) The claims of said Letters Patent are vague, indefinite and ambiguous and do not point out and distinctly claim the parts or alleged improvements

claimed as the patentees' alleged invention as required by law.

(e) Said Letters Patent, and particularly the claims thereof are not properly based on or supported by the disclosures of the application as originally filed in the Patent Office on February 16, 1931, which application resulted in Patent No. 2,056,165, dated October 6, 1936.

(f) The claims of said Letters Patent Re. 23,058 are functional and seek to cover a mere result or effect, and said claims are invalid for the same reason that the original claims were held invalid in the case of Refrigeration Patents Corp. v. Stewart-Warner Corp., 159 F. (2d) 972 (C.C.A. 7) (cert. den. 331 U. S. 834, rehearing denied 332 U. S. 803), and do not cure or overcome the defects on which the original claims were held invalid by the Court of Appeals.

(g) The things disclosed and claimed in said Letters Patent Re. 23,058 constitute mere aggregation of old, well-known elements and mechanisms, and devices having no mutual or necessary co-operation, interaction or interrelation.

(h) Said Letters Patent Re. 23,058 are invalid and void for the reason that the alleged errors in the original Letters Patent No. 2,056,165 did not arise through inadvertence, accident or mistake and without any fraudulent or deceptive intention. The reissue patent and the proceedings thereon in the Patent Office clearly establish that there was no proper showing by the patentees such as to author-

ize a reissue under the statute, even if said patentees were otherwise entitled to reissue, which they were not. This is not a case authorized by the Reissue statute, in view of the opinion of the Court of Appeals in the aforesaid Stewart-Warner case and the facts disclosed by the file histories of said reissue patent and original patent.

(i) The patentees of Patent Re. 23,058 did not, with due diligence, seek a reissue, and said patent and the claims thereof are, therefore, invalid.

(j) No disclosure or description was made, by the patentees in the application for original patent 2,056,165, of the character of the original claims held invalid, or of the reissue claims, until more than two years after plaintiff's predecessor had manufactured and publicly sold in the United States, refrigerators embodying the alleged invention purported to be covered by claims of the character of those held invalid and those of the reissue, which devices were therefore in the public domain and not subject to patent appropriation by said applicants, and the claims of said reissue patent are, therefore, invalid.

(k) The claims in reissue patent 23,058 in suit are invalid because they are based upon a disclosure or claims first presented more than two years after refrigerators embodying said alleged invention were built and sold publicly in the United States, as was held in connection with claim 11 of original Patent 2,056,165 in General Electric Co. v. Refrigeration Patents Corp., 71 U.S.P.Q. 236.

(1) Plaintiff's predecessor misrepresented to the Examiner of the Patent Office, in connection with the application for reissue of the patent in suit, the decision of the Court of Appeals in the Stewart-Warner case and the law applicable as to invalidity of claims for a result or an effect, which has uniformly obtained in the Supreme and other Courts ever since 1853, and on such and other misrepresentations induced the Examiner to improperly and wrongfully allow said reissue, and also failed to disclose to the Examiner the adverse holding of the Court in the said General Electric case with respect to Claim 11 of the original patent, the subject matter on which it attempted to obtain the reissue patent, having been first disclosed in the original application more than two years after plaintiff's predecessor had publicly manufactured and sold refrigerators in the United States embodying the alleged invention attempted to be secured by said reissue. Prior to filing this suit and since, the plaintiff and/or its alleged predecessors, through their agents and representatives and those in active concert or participation with them, have extensively carried on, throughout the United States, propaganda or a program attempting to try the reissue patent in suit, through the mail and press, and particularly to sell the public that the patent in suit and the claims thereof are valid, all in advance of the trial of this case. As a part of its avowed plan to assert the patent in suit, it entered into an arrangement or agreement in the State of

New York, transcending the rules of champerty and maintenance and in violation of the Statute and laws of the State of New York for the purpose of asserting claims for damages under the patent in suit against the industry, including this defendant. Therefore, plaintiff is guilty of such practice and unclean hands in connection with the subject matter of this suit, as to disentitle it to any relief under said reissue patent against this defendant.

(m) Intervener avers that in the interval between the date of issue of original Letters Patent No. 2,056,165 and the date of application for reissue thereof, and while the filing of said application was being unreasonably delayed following the decision of the Court of Appeals for the Seventh Circuit holding said original patent invalid and void in the aforesaid Stewart-Warner case, this intervener and the public acquired intervening adverse rights against each and all of the asserted claims of invention made by the claims of said Letters Patent Re. 23,058; wherefore, intervener and the public are free to make, use and sell the alleged infringing devices.

(n) Intervener avers on information and belief that plaintiff, Moist Cold Refrigerator Co., Inc., is successor in interest to Refrigeration Patents Corporation, plaintiff in the case of Refrigeration Patents Corp. v. Stewart-Warner Corp., 159 F. (2d) 972 and, as successor in interest, is estopped to assert said reissue patent Re. 23,058 against intervener, inasmuch as intervener is the successor to the entire refrigerator business of said Stewart-

Warner Corporation, the defendant in said litigation.

Wherefore, Intervener Prays:

(a) That the complaint be dismissed.

(b) That this Court decree that United States Letters Patent Re. 23,058 is invalid and void.

(c) That this Court decree that United States Letters Patent Re. 23,058 have not been infringed by intervener.

(d) That this Court grant preliminary and final injunction enjoining and restraining plaintiff, and the officers, agents, employees, associates or representatives of Moist Cold Refrigerator Co., Inc., or anyone in its behalf, from further asserting, contending, claiming or alleging that said Letters Patent Re. 23,058, or any claim or claims thereof, have been or are now being infringed by intervener.

(e) That intervener have judgment for its costs, including a reasonable attorney's fee, and for such other and further relief as this Court may deem proper.

ADMIRAL CORPORATION,

By /s/ W. E. RAMSEY,
Its Attorney.

Of Counsel:

/s/ FRANK H. URIELL,

/s/ CHAS. L. BYRON,

/s/ GORDON F. HOOK.

[Endorsed]: Filed October 29, 1951.

[Title of District Court and Cause.]

INTERVENOR'S ANSWER

Amana Refrigeration, Inc., an Iowa Corporation, having its principal place of business at Amana, Iowa, as intervenor herein, for its answer to the complaint:

1. Admits the allegations of paragraph 1 that this action arises under the Patent Laws of the United States, but has no information as to plaintiff's title to said patent in suit and, therefore, leaves plaintiff to its proof.

2. Has no knowledge of the allegation of paragraph 2, and therefore leaves plaintiff to its proof.

3. Denies the allegation of paragraph 3 with respect to defendant's infringement of said patent by the sale and use of household refrigerators, Model No. FR-9, Model FR-9-A, and Model FR-9-S, manufactured by Amana Refrigeration, Inc. Intervenor has no knowledge of the remaining allegations of paragraph 3.

4. Denies the allegations of paragraph 4 with respect to defendant's infringement of said patent by the sale and use of household refrigerators, Model No. FR-9, Model FR-9-A, and Model FR-9-S, manufactured by Amana Refrigeration, Inc. Intervener has no knowledge of the remaining allegations of paragraph 4.

5. Admits the allegations of Paragraph 5.

6. Admits that reissue patent Re. 23,058 was issued, as alleged in Paragraph 6, but denies that it was duly and lawfully issued. Intervener has no information as to plaintiff's title to said patent, and, therefore, leaves plaintiff to its proof.

7. Denies the allegation of paragraph 7 with respect to infringement, but admits that it has no established place of business within the district of Oregon.

8. Answering further, intervener avers that no household refrigerators including Model No. FR-9, Model FR-9-A, and/or Model FR-9-S manufactured, used or sold by it infringes any claim of said Letters Patent Re. 23,058; and that the claims of said Letters Patent are so limited in terms and in light of the prior art and by virtue of limitations and interpretations necessarily placed upon them during the prosecution of the application therefor in the Patent Office as to render them ineffective in scope to cover any refrigerator manufactured, used or sold by intervener, and plaintiff is estopped by the proceedings of the Patent Office in connection with the prosecution of the applications for said Letters Patent to assert that any household refrigerator manufactured, used, or sold by intervener constitutes an infringement of any of the claims thereof.

9. Intervener, upon information and belief, avers that said Letters Patent Re. 23,058 and the claims thereof are invalid on the following grounds:

(a) The alleged invention, set forth and claimed therein, and all substantial and material parts thereof, were described in patents, granted, filed or published, prior to the alleged invention thereof by Bronaugh and Potter, or more than two years prior to the filing date of the application for the original Letters Patent on which said Reissue is based, said patents including the following, among others:

United States Letters Patent

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1,798,951—Carl Georg Munters	March 31, 1931
1,985,252—C. F. Henney	December 25, 1934

(b) The subject matter described and claimed in said Letters Patent Re. 23,058, was, in all essential features old and well known prior to the al-

leged invention thereof by said Bronaugh and Potter, and did not involve any patentable invention whatsoever, but only mere mechanical skill in the selection and adaptation of elements, materials and devices well known in the art.

(c) Said Letters Patent is not in such full, clear, concise and exact terms as required by the statutes of the United States to enable any person skilled in the art or science to which they appertain or with which they are most nearly connected to make, employ or use the same.

(d) The claims of said Letters Patent are vague, indefinite and ambiguous and do not point out and distinctly claim the parts or alleged improvements claimed as the patentee's alleged invention as required by law.

(e) Said Letters Patent, and particularly the claims thereof are not properly based on or supported by the disclosures of the application as originally filed in the Patent Office on February 16, 1931, which application resulted in Patent No. 2,056,165, dated October 6, 1936.

(f) The claims of said Letters Patent Re. 23,058 are functional and seek to cover a mere result or effect, and are, therefore, invalid. Said claims are invalid for the same reasons that the original claims were held invalid in the case of Refrigeration Patents Corp. v. Stewart-Warner Corp., 159 F. (2) 972 (C.C.A. 7), (cert. den. 331 U.S. 834, rehearing denied 332 U. S. 803), and do not cure or overcome

the defects on which the original claims were held invalid by the Court of Appeals.

(g) The things disclosed and claimed in said Letters Patent Re. 23,058 constitute mere aggregation of old, well-known elements and mechanisms, and devices having no mutual or necessary cooperation, interaction or interrelation.

(h) Said Letters Patent Re. 23,058 are invalid and void for the reason that the alleged errors in the original Letters Patent No. 2,056,165 did not arise through inadvertence, accident or mistake and without any fraudulent or deceptive intention. The reissue patent and the proceedings thereon in the Patent Office clearly establish that there was no proper showing by the patentees such as to authorize a reissue under the statute, even if said patentees were otherwise entitled to reissue, which they were not. This is not a case authorized by the Reissue State, in view of the opinion of the Court of Appeals in the aforesaid Stewart-Warner case and the facts disclosed by the file histories of said reissue patent and original patent.

(i) The patentees of Patent Re. 23,058 did not, with due diligence, seek a reissue, and said patent and the claims thereof are, therefore, invalid.

(j) No disclosure or description was made, by the patentees, in the application for original patent 2,056,165, of the character of the original claims held invalid, or of the reissue claims, until more than two years after plaintiff's predecessor had

manufactured and publicly sold in the United States, refrigerators embodying the alleged invention purported to be covered by claims of the character of those held invalid and those of the reissue, which devices were therefore in the public domain and not subject to patent appropriation by said applicants, and the claims of said reissue patent are, therefore, invalid.

(k) The claims in reissue patent 23,058 in suit are invalid because they are based upon a disclosure or claims first presented more than two years after refrigerators embodying said alleged invention were built and sold publicly in the United States, as was held in connection with claim 11 of original Patent 2,056,165 in General Electric Co. v. Refrigeration Patents Corp., 71 U.S.P.Q. 236.

(l) Plaintiff's predecessor misrepresented to the Examiner of the Patent Office, in connection with the application for reissue of the patent in suit, the decision of the Court of Appeals in the Stewart-Warner case and the law applicable as to invalidity of claims for a result or an effect, which has uniformly obtained in the Supreme and other Courts ever since 1853, and on such and other misrepresentations induced the Examiner to improperly and wrongfully allow said reissue, and also failed to disclose to the Examiner the adverse holding of the Court in the said General Electric case with respect to Claim 11 of the original patent, the subject matter on which it attempted to obtain the reissue pat-

ent having been first disclosed in the original application more than two years after plaintiff's predecessors had publicly manufactured and sold refrigerators in the United States embodying the alleged invention attempted to be secured by said reissue. Prior to filing this suit and since, the plaintiff and/or its alleged predecessors, through their agents and representatives and those in active concert or participation with them, have extensively carried on, throughout the United States, propaganda or a program attempting to try the reissue patent in suit, through the mail and press, and particularly to sell the public that the patent in suit and the claims thereof are valid, all in advance of the trial of this case. As a part of its avowed plan to assert the patent in suit, it entered into an arrangement or agreement in the State of New York, transcending the rules of champerty and maintenance and in violation of the statute and laws of the State of New York for the purpose of asserting claims for damages under the patent in suit against the industry, including this defendant. Therefore, plaintiff is guilty of such practice and unclean hands in connection with the subject-matter of this suit, as to disentitle it to any relief under said reissue patent against this defendant.

(m) Intervener avers, that in the interval between the date of issue of original Letters Patent No. 2,056,165 and the date of application for reissue thereof, and while the filing of said application was being unreasonably delayed following the

decision of the Court of Appeals for the Seventh Circuit holding said original patent invalid and void in the aforesaid Stewart-Warner case, this intervener and the public acquired intervening adverse rights against each and all of the claims of said Letters Patent Re. 23,058; wherefore, intervener and the public are free to make, use and sell the alleged infringing devices.

Wherefore, Intervener Prays:

(a) That the complaint be dismissed.

(b) That this Court decree that United States Letters Patent Re. 23,058 is invalid and void.

(c) That this Court decree that United States Letters Patent Re. 23,058 have not been infringed by intervener.

(d) That this Court grant preliminary and final injunctions enjoining and restraining plaintiff, and the officers, agents, employees, associates or representatives of Moist Cold Refrigerator Co., Inc., or anyone in its behalf, from further asserting, contending, claiming or alleging that said Letters Patent Re. 23,058, or any claim or claims thereof, have been or are now being infringed by intervener.

(e) That intervener have judgment for its costs, including a reasonable attorney's fee, and for such other and further relief as this Court may deem proper.

AMANA REFRIGERATION, INC.,

By /s/ CLARENCE J. LOFTUS,
Its Attorney.

Of Counsel:

/s/ W. E. RAMSEY,
CLARENCE J. LOFTUS,
WILLIAM E. LUCAS,
BEAHL T. PERRINE.

[Endorsed]: Filed October 29, 1951.

[Title of District Court and Cause.]

ORDER

On the motion of the three defendants, Lou Johnson Co., Inc., Meier & Frank Company, Inc., and Admiral Corporation, to amend their answers herein by striking paragraph 9(n) therefrom, it is

Ordered that the answers of defendants, Lou Johnson Co., Inc., Meier & Frank Company, Inc., and Admiral Corporation, be and the same are hereby amended by striking paragraph 9(n) therefrom.

Dated April 18th, 1955.

/s/ GUS J. SOLOMON,
United States District Judge.

[Endorsed]: Filed April 18, 1955.

[Title of District Court and Cause.]

ORDER TO AMEND COMPLAINT

Pursuant to the verbal order of this Court on October 17, 1955, during a pretrial conference attended by Orme E. Cheatham, of counsel for plaintiff, and W. Elmer Ramsey and J. Pierre Kolisch, of counsel for defendants, upon motion of plaintiff, it is hereby

Ordered that the original complaint in this proceeding be amended as follows:

In the third line of the next to the last paragraph, strike out the words "Ten Dollars ($10.00)" and substitute therefor—Ten Per Cent (10%) of the manufacturer's sales price.

October 24th, 1955.

/s/ GUS J. SOLOMON,
Judge, U. S. District Court.

[Endorsed]: Filed October 24, 1955.

[Title of District Court and Cause.]

ORDER

On the motion of each defendant herein, namely, Lou Johnson Co., Inc., Meier & Frank Company, Inc., Admiral Corporation and Amana Refrigera-

tion, Inc., for leave of Court to amend their answers herein by adding to the list of United States patents noted therein the following:

United States Patent Reissue No. 21,040, originally issued to J. Loyal Gibson under date of March 16, 1937, original Patent No. 2,073,741, filed September 30, 1930, and reissued April 4, 1939.

United States Patent No. 1,909,875, issued to Ivar Lundgaard May 16, 1933.

Plaintiff was notified of said patents by the service of said motion on the 29th day of September, 1955.

It is Ordered that the answers of said defendants, Lou Johnson Co., Inc., Meier & Frank Company, Inc., Admiral Corporation and Amana Refrigeration, Inc., be and the same are hereby amended by adding thereto the foregoing United States patents.

October 24th, 1955.

/s/ GUS J. SOLOMON,
Judge, United States
District Court.

[Endorsed]: Filed October 24, 1955.

In the United States District Court
for the District of Oregon

Civil Action No. 6016

MOIST COLD REFRIGERATOR CO., INC., an Oregon Corporation,

Plaintiff,

vs.

LOU JOHNSON CO., INC., an Oregon Corporation, and MEIER & FRANK COMPANY, INC., an Oregon Corporation,

Defendants,

and

ADMIRAL CORPORATION, a Delaware Corporation, and AMANA REFRIGERATION, INC., an Iowa Corporation,

Defendants-Interveners.

SUPPLEMENTAL AND AMENDED COMPLAINT FILED PURSUANT TO LEAVE GRANTED AT PRE-TRIAL CONFERENCE BY THE COURT

(Suit for Infringement of United States Letters Patent Re. 23,058)

Plaintiff incorporates by reference and realleges all of the allegations of the complaint in paragraphs I, II, III, IV, V, VI, and VII thereof and adds the following thereto based upon information

presently at hand and proceedings heretofore had herein.

VIII.

Each of the above-identified Defendants-Interveners has, since the date of said reissue patent and prior to its expiration, infringed the same by making, using and selling household refrigerators embodying the inventions of said patent and particularly those identified by the following designations: Amana Models FR-9; FR-9-A and FR-9-S; and Admiral Models No. 958, No. 759, No. 959, No. 1090, No. 1390, No. 1191, No. 1192, No. 1192-W, No. 1292-W, No. 11 C 15, No. 12 C 15, No. 12 C 15A and No. 1292, which infringements were committed after notice thereof was duly given by Plaintiff to each said Defendants-Interveners.

IX.

Each of said Defendants-Interveners have become and now are subject to the jurisdiction of this Court.

Wherefore, plaintiff demands judgment against each of the above-identified Defendants and Defendants-Interveners in an amount equal to 10% of the gross amounts received by it for each and every infringing household refrigerator manufactured, used or sold, and with interest thereon, and that the damages when assessed by the jury be trebled by the Court by reason of the wilful character of said infringement, particularly by Admiral Corporation

and that the costs and disbursements herein including reasonable attorneys fees be awarded plaintiff.

MOIST COLD
REFRIGERATOR CO., INC.,

By /s/ ORME E. CHEATHAM,
Its Attorneys.

Receipt of copy acknowledged.

[Endorsed]: Filed November 15, 1955.

[Title of District Court and Cause.]

AMENDED ANSWER

Defendants and defendants-interveners herein answer plaintiff's supplemental and amended complaint as follows:

1. Deny the allegations of paragraph VIII except that they have made, used and sold the designated models of refrigerators.

2. Admit the allegations of paragraph IX.

Pursuant to leave granted by the Court at a pretrial conference, defendants and defendants-interveners incorporate by reference herein all of the allegations of their answers in paragraphs 1, 2, 3, 4, 5, 6, 7, 8, 9(a)-(m), inclusive, and 9(o) and (p) of the answers of Lou Johnson and Meier & Frank Company heretofore filed herein and add the following:

10. Letters Patent Re. 23,058 and the claims thereof are invalid and of no force and effect in law because:

(a) The claims of said patent define an inoperative device.

(b) The claims of said reissue patent enlarge the scope of the claims of the original patent and were not applied for within two years from the grant of the original patent. (To be added only to the answers of Admiral and Amana.)

Wherefore, defendants and defendants-interveners pray that:

1. The complaint and supplemental and amended complaint be dismissed.

2. U. S. Letters Patent Re. 23,058 be adjudged invalid and void.

3. This Court grant a final injunction enjoining plaintiff, its officers, agents, employees, associates or representatives, or anyone in its behalf, from further asserting or contending, claiming or alleging that Letters Patent Re. 23,058 or any claim or claims thereof have been or are now infringed by defendants and defendants-interveners.

4. Defendants and defendants-interveners have judgment for their costs, reasonable attorneys' fees, and for such other relief as the Court may deem proper.

LOU JOHNSON CO., INC.,
MEIER & FRANK COMPANY, INC.,

ADMIRAL CORPORATION,
and,
AMANA REFRIGERATION,
INC.,

By /s/ W. E. RAMSEY,
Their Attorney.

Of Counsel:

/s/ CHAS. L. BYRON,

/s/ WILLIAM E. LUCAS.

[Endorsed]: Filed November 14, 1955.

[Title of District Court and Cause.]

FINAL PRETRIAL ORDER

This matter came on for pretrial conference on the 17th day of October, 1955, before the undersigned judge of the above-entitled court, following the issuance of the mandate on March 7, 1955, of the United States Court of Appeals for the Ninth Circuit to this Court for further proceedings not inconsistent with the opinion of said Court of Appeals decided November 24, 1954, on the issues of fact, or mixed law and fact, remaining for trial herein on the record and proceedings heretofore had, including the complaint and answers respectively of the parties hereto. Plaintiff appeared by its attorney, Orme E. Cheatham, and the Defendants appeared by their attorneys, W. Elmer Ramsey and J. Pierre Kolisch.

It is hereby agreed by counsel for the Plaintiff and the Defendants that the following facts are correct:

Agreed Statement of Facts

1. Plaintiff, Moist Cold Refrigerator Co., Inc., is an Oregon corporation whose agent for service is B. C. Buck, 714 N. W. Glisan Street, Portland, Oregon.

2. Defendant, Lou Johnson Co., Inc., is an Oregon corporation having a regular and established place of business at 1506 N. W. Irving Street, Portland, Oregon.

3. Defendant, Meier & Frank Company, Inc., is an Oregon corporation having a regular and established place of business at 621 S. W. 5th Avenue, Portland, Oregon.

4. Defendant, Admiral Corporation, is a Delaware corporation having a regular and established place of business at 3800 Cortland Street, Chicago, Illinois.

5. Defendant, Amana Refrigeration, Inc., is an Iowa corporation having a regular and established place of business at Amana, Iowa.

6. Defendants, Admiral Corporation and Amana Refrigeration, Inc., are interveners in this action and were made party defendants by an Order dated October 29, 1951. The defendants, Admiral and Amana, are in full control of the defense of this action.

7. This Court has jurisdiction of the parties and subject matter of the action.

8. The accused structures are refrigerator Models Nos. 759, 958, 959, 1090, 1191, 1192, 1192W, 1292, 1292W, 1390, 11C15, 12C15, and 12C15A, manufactured by or for Admiral Corporation, and refrigerator Models FR-9, FR-9-A and FR-9-S, manufactured by or for Amana Refrigeration, Inc.

9. The application for patent which matured into original patent No. 2,056,165 was executed by patentees January 29, 1931, and said application was filed in the United States Patent Office February 16, 1931. Following proceedings in said Patent Office, said application was allowed and issued as United States Patent No. 2,056,165 on October 6, 1936.

10. On August 12, 1943, Refrigeration Patents Corporation sued Stewart-Warner Corporation in the District Court for the District of Northern Illinois, Eastern Division, Refrigeration Patents Corporation then being the assignee of all right, title and interest in said United States Patent 2,056,165. This case was tried to a jury and the jury's verdict was returned in favor of Plaintiff on November 22, 1944. From this verdict in favor of Plaintiff, Defendant Stewart-Warner Corporation filed its appeal, which was heard by the Circuit Court of Appeals for the Seventh Circuit, and its opinion was reported in 159 F. (2d) 972, holding claims 10, 11, 12, 14, 16 and 18 of said original patent invalid.

which were the only claims in issue in that case. This opinion was handed down February 4, 1947, and a rehearing was denied by the Court March 20, 1947. Defendants contend that the only material or relevant fact is that original United States Letters Patent 2,056,165 was held invalid by the Court of Appeals for the Seventh Circuit on February 4, 1947.

11. On June 2, 1947, Plaintiff, Refrigeration Patents Corporation, petitioned for a writ of certiorari to the United States Supreme Court from the holding of the Circuit Court of Appeals for the Seventh Circuit. The petition was denied (331 U. S. 834) and thereafter a petition for rehearing was denied on October 20, 1947 (332 U. S. 803).

12. Prior to the decision of the Circuit Court of Appeals for the Seventh Circuit in Refrigeration Patents Corporation v. Stewart-Warner Corporation, and on October 8, 1945, General Electric Company filed suit for declaratory judgment on said patent 2,056,165 in the District Court of the Western District of New York against Refrigeration Patents Corporation, and on August 8, 1946, motion for summary judgment was denied (71 U.S.P.Q. 8). On a petition for rehearing, summary judgment was rendered December 2, 1946, in favor of Plaintiff, General Electric Company (71 U.S.P.Q. 326) holding claim 11 invalid, which was the only claim in issue in that case. Appeal was had to the Circuit Court of Appeals for the Second Circuit from said

summary judgment on March 26, 1947, and while awaiting consideration of said appeal and on December 26, 1947, General Electric Company v. Refrigeration Patents Corporation appeal was dismissed by consent of the parties on stipulation. Defendants contend that the only material or relevant facts are that claim 11 of original United States Letters Patent 2,056,165 was held invalid, and Plaintiff consented to dismissal of its appeal.

13. The patentees and their assignee prepared an application for reissue, which was signed by applicant Lewis J. Bronaugh on May 27, 1948, and by applicant Thomas L. Potter on June 1, 1948, which application for reissue was filed in the United States Patent Office on June 18, 1948. Said application contained eleven claims, and in the accompanying oath soliciting the reissue patent, applicants stated that the claims in the original patent had "become ineffective by reason of a decision of the Court of Appeals for the Seventh Circuit." The applicants further contended "that such insufficiency which renders said patent so inoperative has arisen without any fraudulent or deceptive intention on their part." No substantial change was made in the body of the specification.

14. On November 12, 1948, the claims presented with the reissues application were cancelled, and the present claims now included in the reissue patent No. 23,058 were submitted, together with a supplemental oath. And thereafter on December 14, 1948, said reissue patent 23,058 was issued. The reissued

patent was granted for the balance of the life of the original patent, which terminated on October 6, 1953.

15. In the proceedings had before the United States Patent Office in connection with the application for Re 23,658, neither Plaintiff nor its predecessors called to the attention of the Patent Office the decision in said General Electric case involving original patent 2,056,165.

16. The Defendants in this proceeding moved for summary judgment under Rule 56 (FRCP) on a number of issues of law, which motion was treated as a motion for trial of segregated issues of law under Rule 42b (FRCP). Pursuant to a pretrial order dated December 17, 1951, the Court held a full trial of the following contentions of Defendants:

> 1. That the reissue patent 23,058 in suit was not authorized by law. The original patent was adjudged invalid because functional in Refrigeration Patents Corporation vs. Stewart-Warner Corporation, 159 F. (2d) 972 (CCA 7). The patentees deliberately and skillfully drafted and included claims in the original patent to cover any means which anyone might ever discover to produce the same result; therefore, the granting of a reissue patent on the theory of inadvertence, accident, or mistake in describing the invention was not authorized under R.S. 4916 (35 U.S.C. 64).

2. That the reissue patent in suit, its file history, and the original patent and its history, establish that there is no improper showing of inadvertence, accident, or mistake, as is required by the statute as an indispensable prerequisite to granting reissue, and that, therefore, the reissue patent in suit is invalid in law and improperly granted.

3. That the original patent 2,056,165, by virtue of failure on the part of the patentees to file a disclaimer after final adjudication by the Court in Refrigeration Patents Corporation vs. Stewart-Warner Corporation 159 F. (2d) 972 (CCA 7), holding claims 10, 11, 12, 14, 16 and 18 of said patent invalid, become void in its entirety and, accordingly, the surrender of said void original patent was ineffective in law to establish a basis on which a valid reissue could be granted to said patentees, and said reissue patent 23,058 in suit is therefore invalid.

4. The Court of Appeals for the Seventh Circuit, in Refrigeration Patents Corporation vs. Stewart-Warner Corporation, 159 F. (2d) 972, held, claims 10, 11, 12, 14, 16 and 18 of the original patent invalid in law on the ground that they were functional and for a result only. Defendants allege that each and all of the claims of the reissue patent in suit are invalid in law, as they are functional and contrary to law, attempt to cover a result, and that said reissue

does not cure or overcome the defects or grounds of invalidity on which said original claims were held invalid in law.

5. That the claims in said reissue patent 23,058 in suit are based upon disclosures made in said original application, after the patentees in original patent 2,056,165 had built and sold refrigerators for over two years, and said newly claimed structure was thus in the public domain and not subject to patent appropriation by applicants.

6. That the patentees in original patent 2,056,165 permitted the application which matured into said original patent to be abandoned by failure to prosecute, and did not make a sufficient showing to support their contention that said delay was unavoidable so as to permit revival thereof.

7. That the claims in reissue patent 23,058 in suit are invalid because they are based upon a delayed filing of claims made more than two years after refrigerators embodying said invention were first built and sold, and that the effect or said delayed filing of claims is the same as making a new application and is subject to statutory bar, as was held in connection with claim 11 of original patent 2,056,165 in General Electric Company vs. Refrigeration Patents Corporation (71 U.S.P.Q. 236).

8. That following the decision of the Court in General Electric Company vs. Refrigeration Patents Corporation granting Plaintiff's motion for summary judgment, which was appealed by patentees to the Court of Appeals for the Second Circuit (600 O.G. 664), and filing of consent decree of dismissal therein given on December 26, 1947 (608 O.G. 9), Plaintiff, or its predecessors in interest, failed to:

(a) Disclaim said claim 11 in due time, or at all;

(b) Call to the attention of the Patent Office upon application for reissue patent 23,058 said General Electric Company vs. Refrigeration Patents Corporation litigation and said adverse holding with regard to claim 11 of the original patent, and this failure to advise the Patent Office constituted fraud, which vitiated said reissue patent.

9. That the patentees of original patent 2,056,165 were under a duty to disclaim within a reasonable time after denial of a writ of certiorari by the United States Supreme Court. In Refrigeration Patents Corporation vs. Stewart-Warner Corporation 159 F. (2d) 972, certiorari was denied by the United States Supreme Court June 2, 1947 (331 U. S. 834), and a petition for rehearing of said petition for a writ of certiorari was denied by the United States

Supreme Court on October 20, 1947 (332 U. S. 803), and that patentees' actions between June 2, 1947, and June 18, 1948, were not a diligent exercise of said duty, and that said failure to observe said duty renders the claims of said reissue patent 23,058 invalid.

17. The District Court, in an oral opinion dated March 4, 1953, followed by a written opinion included findings of fact and conclusions of law dated March 24, 1953, ruled as follows with respect to the above issues, except that no ruling was made as to Defendants' contentions Nos. 3, 6, 8a and 9 for the reason that they were expressly abandoned by the defendants during the course of the trial.

(a) Defendants' contentions Nos. 1 and 2 were allowed, thus holding the reissue patent invalid.

(b) Defendants' contention No. 4 was overruled for the reason that the Court found it could not pass upon the matter without the aid of expert testimony.

(c) Defendants' contentions Nos. 5 and 7 were not granted because the Court found that an issue of fact was raised which could not be determined without additional evidence.

(d) Defendants' contention No. 8b was expressly overruled because the Court found as a fact that the file wrapper of the original patent No. 2,056,165 showed that the General Electric litigation was called to the attention of the Patent Office by

the Clerk of the Court in which the litigation was pending.

(e) The precise wording of the District Court's finding of fact with respect to the abandoned contentions is as follows:

> "All other contentions of the Defendants as set forth in the pretrial order, being numbered 3, 6, 8(a) and 9, were expressly abandoned by the Defendants and the intervenors and are therefore not considered here."

18. Plaintiff filed notice of appeal from the decision of the District Court on March 24, 1953. The Court of Appeals for the Ninth Circuit reversed the District Court and remanded the cause to the District Court for further proceedings not inconsistent with its opinion. The Supreme Court then refused to grant Defendants' petition for certiorari, and on March 7, 1955, the mandate of the Court of Appeals was forwarded to this Court.

19. All of the elements claimed in the United States Letters Patent Reissue 23,058 are old in the art.

20. The period for which recovery may be had in this proceeding commences with the date of the reissue patent and terminates on the expiration date of the original patent, specifically from December 15, 1948, to October 5, 1953.

21. After the issuance of Reissue No. 23,058 to T. Irving Potter and Lewis J. Bronaugh and during

the life thereof, the defendant, Lou Johnson Co., Inc., sold to the defendant, Meier & Frank Company, Inc., devices manufactured by Admiral Corporation and devices manufactured by Amana Refrigeration, Inc., alleged in the complaint to infringe the patent in suit.

22. After the issuance of Reissue No. 23,058 to T. Irving Potter and Lewis J. Bronaugh and during the life thereof, the defendant, Meier & Frank Company, Inc., sold to the public devices manufactured by Admiral Corporation and devices manufactured by Amana Refrigeration, Inc., which it in turn had purchased from Lou Johnson Co., Inc., being the same devices described in item 22 hereof.

23. Admiral Corporation has agreed to indemnify and save harmless from loss, damage or liability by reason of a finding of infringement in this action, Lou Johnson Co., Inc., and Meier & Frank Company, Inc., so far as refrigerators manufactured by it are concerned, and Amana Refrigeration, Inc., has agreed to indemnify and save harmless from loss, damage or liability by reason of a finding of infringement in this action, Lou Johnson Co., Inc., and Meier & Frank Company, Inc., so far as refrigerators manufactured by it are concerned.

Contentions of Plaintiff

1. The accused refrigerators of Admiral Corporation and of Amana Refrigeration, Inc., infringe Reissue Patent No. 23,058.

2. Reissue Patent No. 23,058 is in all respects valid and for the first time disclosed in the household refrigerator art a substantial innovation in the form of a novel combination of old elements which solved problems of long standing in a fundamental way, which combination was not obvious to those skilled in the art who attempted and failed to achieve such long sought results prior to said patent.

3. Defendants' contention No. 1-1 cannot be raised at this time since the District Court has already specifically found for Plaintiff on this issue in the original trial of segregated issues, and Defendants did not appeal that ruling; also the issue is immaterial since the Clerk of the Court in which a patent case is heard is required by law to advise the Patent Office concerning the decision of the Court, and the Clerk did so in this instance.

4. Defendants' contention No. 1m cannot be revived after express abandonment of this contention in the original trial of segregated issues.

5. Defendants' contention No. 1n cannot be revived after express abandonment of this contention in the original trial of segregated issues.

6. Defendants' contention No. 5 cannot be raised as an issue at this time, the Defendants having admitted the fact for the purpose of trial and having permitted the Court to hold a full trial of segregated issues on basis of admitted ownership of the patent in suit by Plaintiff.

7. Defendants' contention No. 6a cannot be raised at this time because of the express finding for Plaintiff of this issue in the trial of segregated issue, from which Defendants did not appeal.

8. The defect in the claims which were held invalid in Refrigeration Patents Corporation vs. Stewart-Warner Corporation, 159 F. (2d) 972, (C.C.A. 7), has been corrected by the reissue patent and the claims therein are not subject to the objections of the Seventh Circuit Court of Appeals.

9. The claims in the reissue patent are valid in law as complying with the ruling of the United States Supreme Court in Faulkner vs. Gibbs, 338 U. S. 267, which modifies and explains the Court's decision in Halliburton Oil Well Cementing Corporation vs. Walker 329 U. S. 1.

10. The claims in the reissue Letters Patent 23,058 are based upon adequate disclosure made in the original application as filed, the same being adequately supported by the drawing as filed with the Patent Office. The present claims are distinguished from the claims which were held invalid in Muncie Gear Works, Inc., et al., vs. Outboard Manufacturing Co., 315 U. S. 759 which established the late claiming doctrine. In the Muncie Gear case it was impossible to ascertain from either the drawing or the specification as originally filed the features to which the claims presented for the first time more than two years subsequent to the public use and sale of the apparatus in question were directed.

Also the expansion of the specification made in the original application by the third amendment filed September 15, 1933, was valid under the doctrine of inhereney.

11. The patentees in original patent 2,056,165 were the victims of improper conduct upon the part of their nonlawyer patent solicitor in permitting the original application to be abandoned by failure to prosecute and that as soon as his prejudicial conduct was made apparent the patentees took timely steps to revive the application. A question of fact is involved which requires a full trial on the merits, and a question of law is involved in that the decision of the Commissioner of Patents in holding the delay unavoidable is not subject to judicial review unless it be apparent that the action of the Commissioner of Patents was capricious and arbitrary, the burden of the proving of which is upon the Defendants.

12. Plaintiff has never agreed with the holding of the District Court of the Western District of New York in General Electric vs. Refrigeration Patents Corporation, 71 U.S.P.Q. 236, and contends that the decision of the Court was based upon an erroneous interpretation of the affidavit of Mr. Potter which was filed in the Patent Office in connection with the petition to revive.

13. The claims in the reissue patent are narrower than the claims in the original patent, hence there is a factual question as to whether the two-year delay in filing claim 11 in the original patent is of

any bearing upon the validity of claims 1 to 4 of the reissue patent. The narrowed scope of claims 1 to 4 of the reissue patent as compared with the scope of claim 11 of the original patent eliminates application of the doctrine of the Muncie Gear case.

14. The Patent Office had before it the notices of the Clerk of the Court of the Western District of New York concerning General Electric Company vs. Refrigeration Patents Corporation at the time the reissue patent application was filed. There can be no fraud charged against the patentees merely because they did not discuss this decision in the reissue application since this was a matter of public record and was of necessity before the Examiner at the time the reissue was prosecuted. There was no necessity for discussing the General Electric decision since the sole problem of patentees was to correct the claims of the invention in compliance with the Halliburton decision of the United States Supreme Court.

15. Plaintiff made a timely application for reissue patent after denial of certiorari by the United States Supreme Court on January 2, 1947, and denial of a petition for rehearing on October 20, 1947, and said reissue patent 23,058 was issued in accordance with the law.

16. Each and every one of Defendants' contentions is contrary to the fact, except as distinguished above.

17. The accused structures either directly infringe the claims of the reissue patent, or the differences are mere subterfuges to avoid literal infringement, or the accused structures are combinations of elements combined in substantially the same manner as the combination of the reissue patent and achieve substantially the same result in substantially the same manner of operation.

18. There is no basis in law or fact for any charge of unclean hands.

19. Functional statements in claims are sanctioned by the third paragraph of Section 112 of the Patent Act of July 19, 1952, which is expressly applicable to previously issued patents, and Defendants' contention 1i is no longer available as a defense.

20. There is no basis in law or fact for a defense based upon Defendants' contention 1k.

21. The application for reissue was diligently made.

22. Contentions 2d and 2g of Defendants are not valid defenses since the mere making of a portion of a combination in two parts instead of the one part called for in the patent does not avoid infringement.

23. Contentions of Defendants such as 2h do not constitute valid defenses since the mere addition of immaterial elements does not avoid infringement.

24. Contentions of Defendants in all of paragraph 2 are not valid defenses since immaterial changes, or improvements on the patented structures, do not avoid infringement.

25. That the burden of proof as to invalidity in suit rests heavily upon the defendants and must be sustained by proof beyond any reasonable doubt, being the same standards as set in a criminal case.

26. The mere existence of all elements of the patented combination in other combinations old in the art but not in the patented combination, does not amount to anticipation.

27. That since 1951 and the decision in Hotchkiss vs. Greenwood, 52 U. S. 248, 267, the decided cases show that patentable inventions may be divided into two groups—a small group where, as here, the invention satisfies a long-felt want, and a larger group where it does not; and when the facts show such a long-felt want every change, no matter how simple, which meets the need is clearly demonstrated to be beyond ordinary skill, it being absurd to assert that a thing was obvious when history proves it was not.

28. That Admiral Corporation is estopped to assert that the invention of Reissue 23,058 and its original No. 2,056,165 is not a true patentable combination as was held in the case of Refrigeration Patents Corp. vs. Stewart-Warner Corp. by the District Court after a full trial, which holding was not reversed by the Court of Appeals in its opinion

reported at 159 Fed. 2d 972, inasmuch as Admiral Corporation is the successor to the entire refrigerator business of said Stewart-Warner Corp., and the Plaintiff is the successor to the entire right, title and interest of said Refrigeration Patents Corp.

29. That none of the Defendants has acquired any intervening right, even if any of them made substantial preparation prior to December 14, 1948, to infringe Reissue 23,058, which fact is denied, for the reason that said reissue is a narrowed reissue or contains no claim broader in scope than other claims of original patent 2,056,165, which claims were infringed by the structures of each of the Defendants of which complaint is herein made.

30. That Plaintiff had a perfect right, under the laws of the State of New York, to acquire from its predecessor the entire right, title and interest in and to Reissue No. 23,058, and to offer, as it did, to license others including intervenors herein prior to the bringing of this suit, and that Plaintiff is not thereby guilty of unclean hands as contended by Defendants.

31. The changes which the Defendants have achieved in the accused structures are so contrived as to suggest deliberate camouflaging of the essential characteristics in order to misdirect attention.

32. If any contentions of Defendants are considered pure issues of law, Defendants are estopped to raise them at this time after having a full trial of segregated issues of law.

33. If the Defendants present any evidence sufficient to support either of contentions 5 and 7 of the Defendants in the pretrial order of the trial of segregated issues of law, only claims 3 and 4 of Re. 23,058 would be affected thereby as they generally correspond to claim 11 of the original patent.

34. Plaintiff objects to Defendants' Exhibits 110, 111, 119a, 119b and 119c on the basis that neither the Lundgaard nor the Gibson patents comprise statutory bars to the grant of the patent in suit.

35. Plaintiff objects to Defendants' Exhibit 118 on the basis that Potter's later patent is not relevant to any issue or contention in this suit.

36. Defendants jointly, as well as severally, have infringed by making or selling, or both, or using, refrigerators as accused herein.

37. The infringement by Admiral Corporation was willful and deliberate and done with full knowledge and intent to appropriate the property of the patent in suit without compensation.

38. A just and firm measure of Plaintiff's damages is ten per cent of the manufacturers' sales prices of the accused refrigerators for each unit sold by any and all of the defendants, and that in the case of sales by Admiral Corporation said sum should be trebled by reason of that Defendant's willful infringement as the successor to Stewart-Warner Corporation.

39. That costs and attorney's fees should be awarded Plaintiff herein.

DEFENDANT'S CONTENTIONS

1. Reissue patent No. 23,058 is invalid because:

a. By reason of the state of the prior art existing at the time of the alleged invention by the patentees of the matter disclosed in the patent, said matter was not an invention and did not require the use of any exercise of the inventive faculty for its production, was obvious to and involved only the mechanical or ordinary skill of those versed in the art to which said matters pertain, and was not patentable.

b. L. J. Bronaugh and T. I. Potter were neither the original, or first, or joint, or any inventors or discoverers of any alleged invention defined by its claims of said letters patent.

c. The alleged invention was known to others before the alleged invention thereof by said patentees.

d. The alleged invention was in public use or on sale in this country more than two years prior to the date of application for said original patent.

e. The specification of said letters patent is not in such full, clear, concise, and exact terms as required by the statutes of the United States to enable any person skilled in the art of science to which it pertains, or with which it is most nearly connected, to make and use the same.

f. The claims of said letters patent are vague, indefinite, and ambiguous and do not point out and distinctly claim the subject matter which the patentees regarded as their alleged invention, as is required by statute.

g. The claims in said reissue letters patent define either a different invention than that disclosed in said original patent 2,056,165, or else the claims in said reissue patent define an inoperative device.

h. The claims of said reissue patent enlarge the scope of the claims of the original patent and were not applied for within two years from the grant of the original patent.

i. The claims of said letters patent are functional and attempt to cover a mere result or effect and are therefore invalid for the same reasons that the claims in the original patent 2,056,165 were held invalid in the case of Refrigeration Patents Corp. v. Stewart-Warner Corp., 159 F. 2d. 972.

j. The alleged invention set forth and claimed in said letters patent in suit and all substantial material parts thereof had been shown, described, and patented prior to the alleged invention thereof by said patentees or more than two years prior to the filing date of the application for the original letters patent in the following United States letters patents:

No. and Patentee:	Date
1,439,051—August P. Anderson	Dec. 19, 1922
Re. 21,941—J. Lowell Gibson	Nov. 11, 1941
1,776,235—Lester U. Larkin	Sept. 16, 1930
1,731,711—Ransom W. Davenport	Oct. 15, 1929
1,726,344—Ransom W. Davenport	Aug. 27, 1929
1,769,118—Ransom W. Davenport	July 1, 1930

No. and Patentee:	Date
1,324,868—Fred W. Wolf	Dec. 16, 1919
1,909,875—Ivar Lundgaard	May 16, 1933
1,371,235—George A. Case, et al.	Mar. 15, 1921

k. The claims in said letters patent are based on a delayed filing of claims made more than two years after refrigerators embodying the alleged invention were first made and sold. The structures claimed in the reissue patent were in the public domain and not subject to patent appropriation by anyone.

l. Following the decision in General Electric Co. v. Refrigeration Patents Corp. holding claim 11 of original patent 2,056,165 invalid, the patentees failed, during the prosecution of the application for said reissue patent, to call to the attention of the Patent Office the adverse and unreversed court decision concerning said claim of the original patent.

m. The patentees of original patent 2,056,165, after denial of certiorari in the case of Refrigeration Patents Corp. v. Stewart-Warner Corp., were not diligent and failed to apply within a reasonable time for a reissue thereof.

n. The original application for patent No. 2,056,165 was abandoned by the patentees and was improperly revived in the Patent Office and was therefore not legally issued and therefore could not be legally reissued.

o. Each of the claims constitutes a mere aggregation of old well-known elements, mechanisms and

devices having no mutual or necessary co-operation, interaction or interrelation, and they did not define a combination producing a new and surprising result.

2. Defendants have not infringed reissue patent 23,058 because:

a. All of the claims call for a cooling refrigerant expander having "heat conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 F. while withdrawing heat from said compartment." Any expanders having heat conducting surfaces in the accused structures neither lie within said cooling compartment nor are they maintained at a temperature above 32 F.

b. The claims of the patent also call for a refrigerator having "a dry cold surface for preserving foods in frozen condition." This is defined in the specification as one where any evaporation "will be deposited as snow rather than as ice, due to the low temperature prevailing in the compartment 13. In other words there is no objectionable frosting in the cold storage compartment." Any exposed surface in the freezing compartment of the accused refrigerators accumulates frost.

c. The claims of the patent also call for "a freezing refrigerant expander having heat conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature well below 32 F.

while withdrawing heat from said compartment." Any freezing refrigerant expanders in the accused refrigerators do not have a heat conducting surface lying within the freezing compartment.

d. The claims of the patent also call for "a single liquefying unit associated with said expanders and constructed and arranged to condense refrigerant expanded by heat extracted by said expanders from both said compartments." The accused structures have two liquefying units each one of which is associated with a separate and distinct volatile refrigerant. The volatile refrigerant for the cooling compartment is separate from the volatile refrigerant for the freezing compartment.

e. Claims 3 and 4 are not infringed for the additional reasons that the thermostat which controls the on-off cycles of the primary liquefying unit is not responsive to the temperatures in the cooling compartment, but is located adjacent and is responsive to the temperatures in the freezing compartment in the accused structures, and it is the flow of heat into the freezing compartment rather than into the cooling compartment that controls the on-off operation of the refrigerator mechanism.

f. Claims 1 and 3 of the patent call for "air in said cooling compartment having a substantially stable temperature of about 40° F. and having a humidity whose relative value is at least 100% at 32° F." In any of the accused structures, there are neither stable temperatures nor stable humidities.

g. All of said claims call for a volatile refrigerant in said expanders, which volatile refrigerant circulating through said expanders is the sole heat extracting medium. In the accused structures there are two separate and distinct volatile refrigerants, each flowing through its separate and distinct circuit and each circuit includes an expander arranged therein.

h. All of the claims of the patent in suit call for a thermostat responsive to compartment temperatures. In any of the accused devices, thermostatic controls lie outside of the compartments and respond to liner temperatures and not to compartment temperatures.

i. Claims 3 and 4 provide that "the thermal insulation around said cooling compartment offering less resistance to flow of heat thereto from the outside atmosphere than does the thermal insulation of the freezing compartment to insure starting of said liquefying unit by heat flow into said cooling compartment during an off cycle of said liquefying unit before the temperature in said freezing compartment approaches a non-freezing value." In any of the accused structures, starting of the primary liquefying unit is insured not by heat flow into the cooling compartment, but by heat flow toward the freezing compartment.

3. Even if the claims in suit were construed so broadly as to be readable upon the accused structures as a matter of language, there is no infringe-

ment because the construction, function or operating principles, and purported result which flows from the patent claims, are different from those of the accused structures.

4. The claims of said reissue patent are so limited in terms, and in the light of the prior art, and by virtue of limitations and interpretations necessarily placed upon them during the prosecution of the applications for the original patent and the reissue thereof while said applications were in the Patent Office, as to render them ineffective in scope to cover any refrigerator manufactured, used or sold by any of the Defendants herein, and Plaintiff is estopped by the proceedings of the Patent Office in connection with the prosecution of the applications, and either of them, to assert that any household refrigerator manufactured, used or sold by the Defendants herein constitutes an infringement of any of the claims thereof.

5. Defendants and each of them have no knowledge as to the ownership of United States Patent No. Re. 23,058, granted to L. J. Bronaugh and Thomas I. Potter, and dated December 14, 1948, said patent being a purported reissue of original patent No. 2,056,165, dated October 6, 1936, and have put Plaintiff on proof as to its title.

6. The complaint should be dismissed because Plaintiff has unclean hands and is not entitled to any relief in a court of equity because:

a. The patentees of said reissue patent and Plaintiff's predecessor deliberately concealed and misled the Patent Office in connection with the application for reissue of said patent by failing to inform the Patent Office concerning the decision in the case of General Electric Co. v. Refrigeration Patents Corp.

b. Plaintiff entered into an agreement in New York State with respect to proposed patent litigation, like the present suit, that violates Section 275 of the Penal Law of the State of New York, which provides:

> "No person or co-partnership, engaged directly or indirectly in the businesses of collection and adjustment of claims, and no corporation or association, directly or indirectly, itself or by or through its officers, agents or employees, shall solicit, buy or take an assignment of, or be in any manner interested in buying or taking an assignment of bond, promissory note, bill of exchange, book debt, or other thing in action, or any claim or demand, with the intent and for the purpose of bringing an action or proceeding thereon; provided however, that bills receivable notes receivable, bills of exchange, judgments or other things in action may be solicited, bought, or assignment thereof taken, from any executor, administrator, assignee for the benefit of creditors, trustee or receiver in bankruptcy, or any other person or persons in

charge of the administration, settlement or compromise of any estate, through court actions, proceedings or otherwise. Nothing herein contained shall affect any assignment heretofore or hereafter taken by any moneyed corporation authorized to do business in the state of New York or its nominee pursuant to a subrogation agreement or a salvage operation, or by any corporation organized for religious, benevolent or charitable purposes.

"Any corporation or association violating the provisions of this section shall be liable to a fine of not more than five thousand dollars; any person or co-partnership, violating the provisions of this section, and any officer, trustee, director, agent or employee of any person, co-partnership, corporation or association violating this section who, directly or indirectly, engages or assists in such violation, is guilty of a misdemeanor. Formerly §276, amended L. 1934, c. 534, §2; renumbered 275 and amended L. 1939, c. 822, §13, L. 1940, c. 198, §2; L. 1941, c. 549, eff. April 19, 1941."

7. Prior to December 14, 1948, the issue date of the reissue patent in suit, Defendants herein made substantial preparation for the manufacture, use and sale of the accused refrigerators, and did manufacture, use, buy and sell said accused refrigerators, and did make substantial investment and did substantial business, all before the grant of said reissue, and the said defendants are entitled to continue the use of, or to sell to others to be used or

sold, and to continue the manufacture, use and sale of said accused refrigerators during the term of said reissue patent.

8. Costs and attorney's fees should be awarded to Defendants herein.

Issues

1. Was the alleged invention of the United States Letters Patent Reissue No. 23,058 known or used by others in this country or patented or described in a printed publication in this country before the invention thereof by the patentees?

2. Was the alleged invention of the United States Letters Patent Reissue No. 23,058 described in a printed publication in this country or in public use or on sale in this country more than two years prior to the date of the application for original patent No. 2,056,165 or the insertion of new claims therein?

3. Was the alleged invention of Reissue Patent No. 23,058 described in a patent granted on an application for patent by another, filed in the United States before the date of the alleged invention of said reissue patent?

4. If there is any difference between the subject matter of reissue No. 23,058 and the prior art, is this difference one which would not have been obvious to a person having ordinary skill in the art?

5. Are the admittedly old elements in Reissue No. 23,058 assembled in such a manner as to produce a patentable combination?

6. Is Reissue No. 23,058 valid?

7. If Reissue No. 23,058 is valid, do any of the accused structures infringe any of its claims?

8. If said Reissue No. 23,058 is valid and the accused structures infringe any of its claims, how much, if anything, is the Plaintiff entitled to recover from Defendants for infringement of said patent?

9. Have the Defendants acquired intervening rights permitting them to use and sell accused refrigerators manufactured prior to December 14, 1948, and to manufacture, use, buy and sell during the term of said reissue patent accused refrigerators for which they made substantial preparation for manufacture, use and sale prior to December 14, 1948?

10. Is Plaintiff guilty of unclean hands?

11. Is the Plaintiff, or any of the Defendants, entitled to an award of costs and attorney's fees?

Statutes Involved

Title 35 USC, particularly sections numbered 4(a), (b), (d), (g), 102, 103, 112 (third paragraph), 251, 252, 261, 271(a), (b), 281, 282, 284, 285, 293.

Jury Trial

Timely demand was made by Plaintiff for trial by jury.

Order

It is now ordered by the Court as follows:

1. That at the trial none of the parties shall be entitled to object to the introduction into evidence of the whole or of any part of any copy of any United States patent, or foreign patent, or publication on the ground that the same has not been certified or authenticated or that the original has not been offered, and the dates appearing thereon shall, in the absence of proof to the contrary, be accepted as correct dates.

2. Plaintiff shall not be precluded by its pretrial specification of documentary exhibits or by this order from offering in support of its affirmative case with respect to Reissue Patent No. 23,058, and Defendants shall not be precluded by any similar specification of documents from offering in support of their case against said patent any further evidence, documentary or otherwise, should the materiality or relevancy thereof be disclosed by later events or should such evidence not be available to the party desiring to offer it at the time of said specification, provided reasonable notice is given and a showing is made which is satisfactory to this Court as consistence with the bona fide execution of this order.

3. The parties agreeing to the above, this order shall not be amended, except by consent of all parties or to prevent injustice, and this order shall

supersede all pleadings for purposes of the trial which is hereby set to begin November 14, 1955.

Dated at Portland, Oregon, this 14th day of November, 1955.

/s/ GUS J. SOLOMON,
Judge, United States District Court.

We approve the foregoing pre-trial order:

/s/ ORME E. CHEATHAM,

/s/ JOHN B. CUNNINGHAM,

Of Attorneys for the Plaintiff.

/s/ CHAS. L. BYRON,

/s/ W. E. RAMSEY,

Of Attorneys for Defendants.

/s/ WILLIAM E. LUCAS.

[Endorsed]: Filed November 14th, 1955.

[Title of District Court and Cause.]

MOTION FOR A DIRECTED VERDICT

Now comes defendants and move that a directed verdict be entered for defendants on the following grounds:

1. Plaintiff's testimony and the documentary evidence establish that the Bronaugh and Potter patent is invalid because:

(a) It is anticipated by Anderson patent No. 1,439,051;

(b) There is no invention over the Anderson patent or Anderson in view of Larkin patent No. 1,776,235;

(c) It is for an aggregation of old elements which produce no new or different result not heretofore produced by them;

(d) The specification of the patent in suit does not meet the requirements of Title 35, U.S.C. Section 112 in that "fins," or a "finned coil," or any other structure for producing a moist cold condition in the cooling compartment is not even mentioned in the specification and, accordingly, the specification does not "contain a written description of the invention * * * in such full, clear, concise and exact terms * * *" as is demanded by the statute;

(e) The claims in suit do not particularly point out and distinctly claim the alleged invention as required by the same Section of the Statute;

(f) Claims covering a non-frosting coil in the cooling chamber and also claims covering differential insulation were submitted to the Patent Office for the first time more than two years after refrigerators embodying said structures were first put on public sale and sold in this country.

2. Plaintiff's testimony and the documentary evidence fail to establish that the accused refrigerators infringe the claims of the Bronaugh and Potter patent because:

(a) All of the claims are for a series type refrigerating circuit and the accused refrigerators have two separate and distinct circuits comprising a primary and a secondary, the primary having its own circulating refrigerant and the secondary having its own separate and distinct refrigerant which never commingle;

(b) All of the claims call for a cooling refrigerant expander having "heat conducting surfaces within said cooling compartment" and a freezing refrigerant expander having "heat conducting surfaces within said freezing compartment"; any expanders in the accused refrigerators are outside the cooling compartment and freezing compartment, respectively;

(c) All of the claims call for a cooling refrigerant expander constructed and arranged to maintain its heat conducting surfaces at a temperature above 32° F. and the accused refrigerators do not have such expanders where such a temperature is maintained;

(d) All of the claims call for a volatile refrigerant circulating through both the cooling and freezing expanders, the volatile refrigerant being the sole heat extracting medium; and the accused refrigerators have two separate and distinct refrigerants thus having no single refrigerant constituting the sole heat extracting medium;

(e) All of the claims call for a single liquefying unit associated with said expanders and constructed

and arranged to condense refrigerant expanded by heat extracted from both said compartments, and the accused refrigerators have two liquefying units or condensors, one in each of the two separate and distinct circuits;

(f) Claims 3 and 4 call for a thermostat responsive to the temperature in said cooling compartment and the thermal insulation around said cooling compartment offering less resistance to flow of heat thereto from the outside atmosphere than does the thermal insulation of the freezing compartment; and there is no proof that the accused Admiral refrigerator has any differences in insulation about the cooling compartment and the freezing compartment, respectively; also, the accused refrigerators do not have a thermostat responsive to the temperature in the cooling compartment which causes the actuation of the liquefying unit in the primary circuit;

(g) The accused refrigerators are of the cold wall type and all of the claims of the patent in suit are for the so-called finned coil type.

Defendants request the Court to instruct the jury accordingly.

/s/ W. E. RAMSEY.
Of Attorneys for Defendants.

[Endorsed]: Filed November 25th, 1955.

[Title of District Court and Cause.]

SPECIAL INTERROGATORIES TO THE JURY

We, the jury, duly impanelled, make the following answers to the following special interrogatories:

I.

Regarding the Question of Validity of Bronaugh and Potter Reissue Patent No. 23058

A. Does the claimed combination of elements (parts) in the Bronaugh and Potter reissue patent produce some new and different function, one that has unusual or surprising consequences?

Answer: Yes.

B. Did Bronaugh and Potter make any invention over the Anderson patent?

Answer: Yes.

C. Did Bronaugh and Potter make any invention over what is shown in the Anderson patent plus the Larkin patent?

Answer: Yes.

D. Do you find the following claims to be vague, indefinite, or ambiguous?

(1) Claim No. 1. Answer: No.
(2) Claim No. 2. Answer: No.
(3) Claim No. 3. Answer: No.
(4) Claim No. 4. Answer: No.

II.

Regarding the Question of Infringement

A. Do defendants' refrigerators have a cooling refrigerant expander (coil with or without extended surfaces) having surfaces within the cooling compartment?

Answer: Yes.

B. Do defendants' refrigerators have only a single liquefying unit associated with refrigerant expanders (coils with or without extended surfaces) and constructed and arranged to condense the refrigerant expanded by heat extracted from both the compartments?

Answer: Yes.

/s/ FRANCES DUYCK,
Foreman.

[Endorsed]: Filed December 2, 1955.

[Title of District Court and Cause.]

VERDICT

We, the jury, find our verdict in favor of the plaintiff, Moist Cold Refrigerator Co., Inc., and against the defendants, and assess plaintiff's damages against the Admiral Corporation at $2,093,180.00, and assess damages against the Amana Refrigeration, Inc., at $45,575.00.

Dated this 2nd day of December, 1955.

/s/ FRANCIS DUYCK,
Foreman.

[Endorsed]: Filed December 2nd, 1955.

[Title of District Court and Cause.]

DEFENDANT'S MOTION NOTWITHSTANDING THE VERDICT

Come now defendants and move that a judgment be entered for the defendants notwithstanding the verdict on the following grounds:

1. Plaintiff's testimony, defendants' testimony, the documentary evidence and physical exhibits establish that the Bronaugh and Potter patent Re. 23,058 is invalid because:

(a) It is anticipated by Anderson patent No. 1,439,051;

(b) There is no invention over the Anderson patent or Anderson in view of Larkin patent No. 1,776,235 and the other prior art of record;

(c) It is for an aggregation of old elements which produce no new or different result not heretofore produced by them;

(d) The specification of the patent in suit does not meet the requirements of Title 35, U.S.C. Section 112 in that "fins," or a "finned coil," or any other structure for producing a moist cold condition in the cooling compartment is not even mentioned in the specification and, accordingly, the specification does not "contain a written description of the invention * * * in such full, clear, concise and exact terms * * *" as is demanded by the statute;

(e) The claims in suit do not particularly point out and distinctly claim the alleged invention as required by the same Section of the Statute;

(f) The claims of Re. 23,058 are all invalid for the same reasons that the Court of Appeals for the Seventh Circuit (159 F. 2d 972) held invalid all of the claims in suit of the original Bronaugh and Potter patent 2,056,165;

(g) Claims covering a non-frosting coil in the cooling chamber and also claims covering differential insulation were submitted to the Patent Office for the first time more than two years after refrigerators embodying said structures were first put on public sale and sold in this country.

2. Plaintiff's testimony, defendants' testimony,

the documentary evidence and the physical exhibits establish that the accused refrigerators do not infringe the claims of the Bronaugh and Potter patent because:

(a) All of the claims are for a series type refrigerating circuit and the accused refrigerators have two separate and distinct circuits comprising a primary and a secondary, the primary having its own circulating refrigerant and the secondary having its own separate and distinct refrigerant which never commingle;

(b) All of the claims call for a cooling refrigerant expander having "heat conducting surfaces within said cooling compartment" and a freezing refrigerant expander having "heat conducting surfaces within said freezing compartment"; any expanders in the accused refrigerators are outside the cooling compartment and freezing compartment, respectively;

(c) All of the claims call for a cooling refrigerant expander constructed and arranged to maintain its heat conducting surfaces at a temperature above 32° F. and the accused refrigerators do not have such expanders where such a temperature is maintained;

(d) All of the claims call for a volatile refrigerant circulating through both the cooling and freezing expanders, the volatile refrigerant being the sole heat extracting medium; and the accused refrigerators have two separate and distinct refrig-

erants, thus having no single refrigerant constituting the sole heat extracting medium;

(e) All of the claims call for a single liquefying unit associated with said expanders and constructed and arranged to condense refrigerant expanded by heat extracted from both said compartments, and the accused refrigerators have two liquefying units or condensors, one in each of the two separate and distinct circuits;

(f) Claims 3 and 4 call for a thermostat responsive to the temperature in said cooling compartment. The accused refrigerators do not have a thermostat responsive to the temperature in the cooling compartment but responsive to the temperature of the liner of the freezing compartment;

(g) The accused refrigerators are of the cold wall type and all of the claims of the patent in suit are for the so-called finned coil type.

3. Even if the Bronaugh and Potter patent in suit were valid and infringed, the verdict of $2,138,775.00, of which $2,093,180 is against Admiral and $45,575.00 is against Amana, is grossly excessive and contrary to the evidence.

Defendants request the Court to enter a judgment for defendants accordingly.

/s/ J. PIERRE KOLISCH,
Of Attorneys for Defendants.

Service of copy acknowledged.

[Endorsed]: Filed December 5th, 1955.

United States District Court
District of Oregon
Civil No. 6016

MOIST COLD REFRIGERATOR CO., INC., an Oregon Corporation,

Plaintiff,

vs.

LOU JOHNSON CO., INC., an Oregon Corporation, and MEIER & FRANK COMPANY, INC., an Oregon Corporation,

Defendants;

and

ADMIRAL CORPORATION, a Delaware Corporation, and AMANA REFRIGERATION, INC., an Iowa Corporation,

Defendants-Intervenors.

JUDGMENT IN FAVOR OF DEFENDANTS AND ORDER GRANTING NEW TRIAL

Defendants' motion for a judgment notwithstanding the verdict, pursuant to Rule 50(b) of the Federal Rules of Civil Procedure, came on regularly to be heard on December 5, 1955, at 2:00 o'clock p.m. At the conclusion of such hearing, the Court was of the opinion and found that the motion for a directed verdict made by the defendants at the close of all the evidence in the case should have been granted, for the reason that it clearly appeared that the patent in suit, namely, U. S. Letters Patent Re. 23,058, is invalid and that even if valid, none of

the accused refrigerators of the defendants infringe such letters patent, all as is more fully set forth in the Court's opinion dated December 5, 1955, on file herein.

The Court now Orders that the special interrogatories and the general verdict in favor of the plaintiff and against defendant Admiral Corporation in the sum of $2,093,180.00 and against Amana Refrigeration, Inc., in the sum of $45,575.00, returned December 2, 1955, be and the same are hereby set aside; and

It is further Ordered that the defendants have judgment in their favor against the plaintiff; and

The Court on its own initiative, and pursuant to Rule 59(d) of the Federal Rules of Civil Procedure, Orders that in the event that the judgment of this Court in favor of the defendants be reversed on appeal, then the verdict of the jury in favor of the plaintiff and against the defendants and the special interrogatories, returned December 2, 1955, shall be set aside, and a new trial granted on the following grounds:

(1) The verdict is contrary to the clear weight of the evidence.

(2) The damages awarded plaintiff are excessive.

Each party shall bear its own costs.

Dated and entered this 8th day of December, 1955.

/s/ GUS J. SOLOMON,
United States District Judge.

[Endorsed]: Filed December 8th, 1955.

[Title of District Court and Cause.]

OPINION OF THE COURT ON DEFENDANTS' MOTION FOR DIRECTED VERDICT AND MOTION FOR JUDGMENT NOTWITHSTANDING THE VERDICT

I do not believe any useful purpose will be served to delay my decision on the motions for a directed verdict and for judgment notwithstanding the verdict.

I am of the opinion that the motions must be granted. I am also of the opinion that even assuming validity and infringement there is no rational basis for the amount of the verdicts that were rendered against defendants Admiral Corporation and Amana Refrigeration, Inc., or either of them.

Both before and during the trial I informed counsel that I wanted to submit this case to the jury because it had been pending for a long time. It had already been to the Court of Appeals once, and the expenses incurred by both sides were great. In addition to numerous depositions of witnesses residing in the East and South, there were a number of lay and expert witnesses from various parts of the United States, and out-of-town counsel were here for many weeks even before the trial.

At the conclusion of the plaintiff's case in chief I seriously considered directing a verdict in favor of the defendants because from the testimony and the exhibits, particularly the prior art patents, it did not appear to me that the plaintiff's patented

device had met the rigid standards of invention laid down in Berkeley Pump Co. vs. Jacuzzi Bros., 214 F. 2d 785 (C.C.A. 9th, 1954); Kwikset Locks vs. Hillgren, 210 F. 2d 483 (C.C.A. 9th, 1954); and in numerous other decisions from our own Circuit as well as from the United States Supreme Court, involving the "assembling (of) old elements, the previous functional operations of which are not changed by their arrangement and inclusion in the device."

The patent in suit involves improvement in a household refrigerator. Each element in the alleged combination was old in the art. They consist of a cabinet, a cooling compartment, a freezing compartment, thermal insulation, a cooling refrigerant expander, a freezing refrigerant expander, volatile refrigerant, a single liquefying unit, and a thermostat. All of these elements, when combined together —and I am not using the word "combined" as a word of art—acted as they had acted in the past, and the end result did not exceed the sum of its parts. Or, stated differently, the old elements making up the device did not perform an additional and different function than they performed out of it.

I was also of the opinion that the alleged combination of the patent in suit "did not perform some new and different function—one that has unusual or surprising consequences."

The patent in suit consisted of a household refrigerator having a separate freezing compartment and a separate cooling compartment operated by a

single liquefying unit with the cooling compartment having a humid temperature, or moist cold, and with a non-frosting coil in the cooling compartment.

I, therefore, came to the conclusion that even if Anderson or some other prior art patent had not fully anticipated the patent in suit in every material part, it was nevertheless invalid because it did not meet the standards of invention as laid down in the decisions to which I have already referred.

I was also concerned about the fact that although it was conceded that the validity of the patent in suit is dependent upon the existence of a fin coil or other extended surface coil, such a coil was not disclosed in the specification. Plaintiff's expert testified that by looking at the drawing he could tell that a fin coil or a brine tank was described. He, therefore, contended that a failure to disclose the fin coil in the specification did not invalidate the patent. However, it appeared to me that the requirements of 35 U.S.C.A., §112, had not been met.

I likewise was in doubt as to whether the claims were sufficiently definite to satisfy the statute. In spite of such conclusions and doubts, I denied defendants' motion for a directed verdict at the end of plaintiff's case in chief.

Thereafter, Mr. Glenn Muffly, defendants' refrigeration and patent expert, testified at great length concerning the validity of plaintiff's patent in suit and also concerning infringement. The only information elicited from Mr. Muffly on cross-examination was that he regarded the Anderson

patent as the closest to the patent in suit. Thereafter, Mr. Parker, plaintiff's expert, again resumed the stand and contradicted the testimony of Mr. Muffly with respect to certain conclusions about which he had testified.

When all of the evidence was in, the defendants again moved for a directed verdict on the same grounds which they had previously urged. Again, I seriously considered granting the motion because by that time it had appeared that, in addition to the patent being invalid, it had not been infringed.

There was no dispute about the structure of the accused devices. They were cold wall refrigerators as distinguished from the fin-type refrigerator which is exemplified in the patent in suit. Likewise, all of the claims of the patent in suit call for a single liquefying unit; in the accused structures there were two liquefying units, each of which had its own volatile refrigerant flowing through a separate and distinct circuit.

Parenthetically, I might add that during the argument to the jury plaintiff's counsel stated that the use of a primary and secondary circuit in the accused structures was an improvement over the structure described in the patent in suit. I wondered at the time how he could establish identity of structure with this admission.

Although plaintiff's counsel denied that the doctrine of equivalents was applicable, the only basis I could discover upon which the jury might find identity of structure was in that doctrine. The jury, in answer to the special interrogatories, found there

to be identical, a finding which in my opinion was proper only if the patent in suit was a pioneer one.

In spite of my added doubts concerning infringement, I decided to submit the whole case to the jury in the hope that another trial could be avoided. If I directed a verdict in favor of the defendants and the Court of Appeals held that I should have submitted it to the jury, then all of the time, trouble and expense incurred in this trial would have been wasted; but if I permitted the jury to make a determination and the jury found in favor of the plaintiff, I could then set aside the verdict and the appellate court would merely be presented with the questions of validity and infringement and could reinstate the verdict if they thought that I had erred. Unfortunately, the verdict of the jury does not make this possible. As I stated previously, there is no rational basis for the amount of damages fixed by the jury.

Even if this patent is valid and infringed, it was a minor improvement in a crowded field, and in my view a royalty of 3 per cent on the selling price or 5 per cent on the manufacturer's price is completely out of line. In addition to a few licensing agreements, none of which showed such a high rate, the only other evidence was the testimony of Mr. Parker based upon a hypothetical question, which assumed that the patent in suit was a pioneer patent or one that had made a long stride in the refrigeration art.

An examination of the file wrappers of the original patent, as well as the patent in suit, clearly showed that this was not the case.

I appreciate the fact that the jury made specific findings, which are contrary to those expressed in this opinion. In spite of my strong attachment to the right of trial by jury, I cannot avoid the responsibility which is mine merely because a jury found to the contrary.

Judge Bone, in Berkeley Pump Co. vs. Jacuzzi Bros., 214 F. 2d 785, beginning at Page 791, clearly sets out the obligation of a trial judge in cases in which "the jury has departed from the relevant legal criteria by which either a jury or a judge must be guided in their or his fact-finding function."

I think that this jury listened carefully to the evidence and tried to render an honest and intelligent opinion. In spite of the attempts of plaintiff's counsel to inject prejudice into the case, I think he was unsuccessful, and I think that the action which I took during the trial and in my instructions to dissipate any such feeling was successful. However, I think that the fault lies in the manner in which the case was presented by the defendants.

At no time was the jury adequately informed of defendants' contentions. The jury, after listening to defendants' opening statement, must have come to the conclusion that the defendants were trying to withhold information from them. The witnesses were examined by defendants' counsel not with the view of convincing a jury, but solely for the purpose of appealing to the court. It was a highly technical presentation, and the closing argument of counsel for the defendants can only be characterized as fantastic. I did not understand the "frost, defrost"

argument which took up a large portion of time consumed by the defendants, and I am sure that the jury did not have the vaguest idea of what counsel was talking about.

However, I cannot permit a judgment on liability or a judgment on damages to stand where there is no basis therefor. Neither the good intentions of juries nor the ineptness of lawyers is an adequate substitute for evidence.

As an equitable defense, the defendants have raised the question of unclean hands. It may very well be that the manner in which this case is being financed is a violation of New York law. I am also concerned about the scores of people who, according to Mr. Potter, are now contributing and who over a period of years have contributed over a million dollars to him and his companies in connection with the prosecution of this patent and this litigation. However, I do not believe that these facts justify a holding of unclean hands.

I merely add that it was primarily because of these people that I did not direct a verdict earlier.

Counsel for the defendants may submit an order in accordance with this oral opinion, which will be transcribed and included in the file of this case and in any transcript that is sent to the Court of Appeals so that the Court of Appeals will know the reasons which motivated me to enter a judgment in favor of the defendants.

[Endorsed]: Filed December 8th, 1955.

[Title of District Court and Cause.]

NOTICE OF APPEAL

To Lou Johnson Co., Inc., and Meier & Frank Company, Inc., Defendants, and Admiral Corporation and Amana Refrigeration, Inc., Defendant-Intervenors, and Messrs. W. Elmer Ramsey, William E. Lucas, Charles L. Byron and J. Pierre Kolisch, Their Attorneys:

Notice Is Hereby Given that Moist Cold Refrigerator Co., Inc., plaintiff above named, hereby appeals to the United States Court of Appeals for the Ninth Circuit from each and every part of that certain Judgment in Favor of Defendants and Order Granting New Trial, entered in this action on the 8th day of December, 1955, and from the whole thereof.

Dated: December 12th, 1955.

/s/ ORME E. CHEATHAM,

/s/ HUGH L. BIGGS,

Of Attorneys for Plaintiff-Appellant.

Service of copy acknowledged.

[Endorsed]: Filed December 12th, 1955.

[Title of District Court and Cause.]

STATEMENT OF POINTS ON WHICH APPELLANT INTENDS TO RELY ON APPEAL

Comes now Plaintiff-Appellant, Moist Cold Refrigerator Co., Inc., and makes the following concise statement of points upon which it intends to rely for appeal to the United States Court of Appeals for the Ninth Circuit from the judgment in favor of defendants and order granting new trial made and entered herein:

1. The Court erred in entering judgment in favor of the defendants notwithstanding the general verdicts of the jury in favor of the plaintiff.

2. The Court erred in entering judgment notwithstanding each and every one of the special verdicts or answers of the jury to special interrogatories propounded by the Court and numbered 1A, B, C and D and 11A and B.

3. The Court erred in finding that the verdict of the jury was contrary to the clear weight of the evidence.

4. The Court erred in holding that the combination of the patent in suit had not met the "rigid standards of invention" laid down by the Ninth Circuit or by the Supreme Court of the United States.

5. The Court erred in holding that all of the elements of the combinations claimed in the four

claims of the patent in suit did not perform additional or different functions in the combination to get a new and patentable unitary result as shown by the evidence herein.

6. The Court erred in finding that the combination of each of the four claims of the patent in suit failed to achieve a new and different function having unusual and unobvious consequences and solving a problem which had long plagued the industry as shown by the evidence herein.

7. The Court erred in holding that it was "conceded" that the validity of the patent in suit depended upon the existence of a fin coil or other extended surface coil, no such concession having been made anywhere in the record.

8. The Court erred in finding that such a coil was not disclosed in the specifications of the patent in suit and in failing to find that the evidence supported the fact that such disclosure was sufficient in the original specification as filed.

9. The Court erred in finding, if it did so find, that the claims were not sufficiently definite to satisfy the patent statute.

10. The Court erred in finding that there was no dispute about the structure of the accused devices and in failing to find that there was such dispute of fact with respect to the purported distinction between the "cold wall refrigerators" and "fin-type refrigerators"; the existence of a single liquefying unit in the accused devices; the mode of operation

and result of defendants' separate and distinct secondary system, all as supported by the evidence in the case, including admissions of the defendants' expert witness.

11. The Court erred in holding, if it did so hold, that the use of primary and secondary refrigerant circuits in the accused devices, being an improvement over the structure disclosed in the patent in suit, established that the accused devices did not infringe any one or more of the claims in suit, and in failing to hold that the existence of such circuit or circuits was immaterial with respect to any issue of infringement all as supported by the evidence in the case.

12. The Court erred in holding that plaintiff's counsel denied the applicability of any doctrine of equivalence and in failing to hold that, as shown by the record, plaintiff's counsel contended that said doctrine was unnecessary and made no concession with respect to its applicability.

13. The Court erred in holding that the claims of the patent in suit were not entitled to any range of equivalency and in failing to hold to the contrary.

14. The Court erred in holding that the patent in suit was not "a pioneer one" or one that had made a long stride in the refrigeration art.

15. The Court erred in finding that there was no rational basis for the amount of the verdicts rendered by the jury, and that the damages awarded by the jury was excessive.

16. The Court erred in holding that the verdicts of the jury did not make possible a reinstatement of those verdicts by the Appellate Court should that Court find the evidence ample to support any one or more of said verdicts, including the amount of the damages found by the jury, as well as the issues of validity and infringement.

17. The Court erred in finding that plaintiff's counsel had attempted to inject prejudice into the case.

18. The Court erred in finding that defendants' counsel failed adequately to inform the jury of defendants' contentions and that defendants' counsel were inept in their handling of the defense of this case.

19. The Court erred in finding, if it did so find, that the manner in which this case is being financed is a violation of the New York law.

20. The Court erred in entering judgment against the plaintiff in that there was sufficient evidence to establish the validity and patentability of the four claims in suit.

21. The Court erred in entering judgment against the plaintiff in that there was sufficient evidence to prove that both of the defendants had infringed the four claims in suit.

22. The Court erred in entering judgment against the plaintiff in that there was sufficient evidence to support the amount of the damages

found by the jury as a reasonable royalty for the use of the invention of the patent in suit.

23. The Court erred in entering judgment which ordered a new trial on the Court's own initiative and pursuant to Rule 59(d) of the Federal Rules of Civil Procedure in the event of a reversal on appeal, and in failing to order that in such event no new trial is necessary.

24. The Court erred in refusing to admit evidence of wilful or joint infringement by Defendant Admiral, which evidence was offered at the trial as shown by the record of excluded evidence appearing at transcript pages 1101-1199.

25. The Court erred in excluding all of the testimony and exhibits of which a record was made at transcript pages 1101-1199.

BUCKHORN & CHEATHAM,

By /s/ KENNETH S. KLARQUIST,

Attorneys for Plaintiff-Appellant.

Dated: February 15th, 1956.

Affidavit of mail attached.

[Endorsed]: Filed February 15th, 1956.

United States District Court
District of Oregon
Civil No. 6016

MOIST COLD REFRIGERATOR CO., INC., an Oregon Corporation, Plaintiff,

vs.

LOU JOHNSON CO., INC., an Oregon Corporation, and MEIER & FRANK COMPANY, INC., an Oregon Corporation,

Defendants.

and

ADMIRAL CORPORATION, a Delaware Corporation, and AMANA REFRIGERATION, INC., an Iowa Corporation,

Defendants-Intervenors.

Portland, Oregon

November 14th, 1955—10:00 A.M.

Before: Honorable Gus J. Solomon,

District Judge, and a jury duly empaneled and sworn.

Appearances:

JOHN B. CUNNINGHAM,
ORME E. CHEATHAM,
ROBERT F. MAGUIRE,
Attorneys for Plaintiff.

W. ELMER RAMSEY,
CHARLES L. BYRON,
J. PIERRE KOLISCH,
Attorneys for Defendants.

TRANSCRIPT OF PROCEEDINGS

The Court: Are the parties ready in the case of Moist Cold Refrigerator Co., Inc., Plaintiff, vs. Admiral Corporation and Amana Refrigeration, Inc.?

Mr. Cunningham: Ready, your Honor.

Mr. Ramsey: We are ready, your Honor.

The Court: Call the jury.

(Thereupon, the jury, with two alternate jurors, was duly empaneled and sworn.)

(The jury having been duly empaneled and sworn, the trial in the above cause was adjourned for the noon recess.)

(At 2:00 o'clock p.m. of the same day, November 14, 1955, trial herein was resumed.)

The Court: Mr. Cunningham, you may proceed.

(Thereupon, Mr. Cunningham made an opening statement on behalf of plaintiff, during the course of which the following proceedings were had:)

Mr. Cunningham: * * * There is one thing I would like to do, your Honor. I wonder if I might borrow from my friends on the other side certain charts that they have marked in pre-trial?

The Court: If it is admitted in evidence, you can use [2*] it. Indicate the charts you want.

*Page numbering appearing at top of page of original Reporter's Transcript of Record.

Mr. Cunningham: I would be very glad to offer it. I believe they are marked Exhibits 114-A and 114-B and 114-C and 114-D.

The Court: Any question about the admissibility of the item of the charts? Mr. Cunningham, do you object to the admission of these by the defendant?

Mr. Cunningham: No, sir. I am offering them now. I may offer them, may I not?

The Court: All right. You can offer defendants' exhibits. Any objection?

Mr. Cunningham: I just have this one over here.

Mr. Ramsey: No objection, your Honor.

The Court: The defendants have no objection to the admission of their own charts in evidence. 114-A, 114-B, 114-C and 114-D are admitted.

Mr. Cunningham: It might help you to, as in introduction, visualize what we have to offer, and these first two boxes, refrigerators—the shiny ones are the accused structures. Do I have to offer these now, sir? I would be glad to.

The Court: Is there any objection to the admission in evidence of any of the physical exhibits such as the refrigerators and the works of the refrigerators?

Mr. Ramsey: None whatsoever.

The Court: All of them are admitted and Mr. Bishop will [3] subsequently take the numbers, but in the meantime refer to any one you want.

* * *

(At 2:30 o'clock p.m., the afternoon recess was taken, after which the following proceedings were had:)

The Court: Mr. Ramsey, you may proceed.

(Thereupon, Mr. Ramsey proceeded with opening statement on behalf of defendants, during the course of which the following proceedings were had:)

Mr. Ramsey: * * * Might I interrupt just a moment?

We have not offered the rest of this series, 114-E to 114-R, and I ask that they be admitted.

The Court: Is there any objection?

Mr. Cunningham: No objection, your Honor.

The Court: They may be admitted, -E to -R, inclusive, 114.

(Documents previously marked Defendants' Exhibits 114-E to 114-R, inclusive, were thereupon received in evidence.) [4]

(Thereupon, Mr. Ramsey continued with the opening statement on behalf of defendants, and at 3:00 p.m. concluded said opening statement.)

The Court: Ladies and Gentlemen of the jury, by agreement of the parties the testimony will not commence until tomorrow morning, so you will have the rest of the afternoon free.

The most important thing in this case will be the testimony and the exhibits, so wait until you hear the testimony before you make up your minds.

There will be these issues that the attorneys brought out. First, is the patent valid, and, secondly, have Amana and Admiral infringed the patents of

the plaintiff even if they are valid. Those are the two issues to keep in mind. You are excused until 9:45 tomorrow morning.

(Thereupon, at 3:10 p.m., the trial in the above-entitled cause was adjourned to Tuesday, November 15, 1955, at 9:45 a.m.) [5]

Tuesday, November 15, 1955

(At 9:45 o'clock a.m., proceedings herein were resumed, pursuant to adjournment, as follows:)

The Court: Mr. Cunningham.

Mr. Cunningham: If your Honor please, I would like to make some formal offers before our first witness, and, Mr. Cheatham, if you will help me get the exhibits and hand them to the Clerk.

I offer in evidence what has heretofore been marked Exhibit 1, Plaintiff's Exhibit 1, the original patent, soft copy; Plaintiff's Exhibit 2, a soft copy of the Reissue Patent in Suit, and I ask that Mr. Cheatham hand your Honor a soft copy for your own use.

Plaintiff's Exhibit 17, being a certified copy of the title documents of the Patent in Suit showing title in the plaintiff Moist Cold, and I have to ask the assistance of the Clerk on these because these are from the files in this case. Some of them go back to the beginning of the case, 1951.

I ask that Plaintiff's Exhibits 4-A to 4-D be produced, and I offer them in evidence.

The Court: Is there any objection?

Mr. Ramsey: I am not quite certain. As far as 1, 2 and 17 are concerned, there are no objections. [6]

Mr. Cunningham: Maybe it will assist everybody if I identify these exhibits as they go in.

The Court: No, that is not necessary. Which ones do you want now, 4-A, -B, -C and -D?

Mr. Cunningham: That is correct, your Honor.

The Court: Do you want the interrogatories?

Mr. Cunningham: The interrogatories to Meier & Frank, to Lou Johnson, Admiral and Amana, respectively.

The Court: Do you want all of the interrogatories, or do you want——

Mr. Cunningham: All of them, your Honor.

The Court: You want the interrogatories or the answers to the interrogatories?

Mr. Cunningham: I want the interrogatories now, your Honor.

The Court: Do you want the interrogatories but not the answers to the interrogatories?

Mr. Cunningham: I do want the answers, sir. They are about to follow. I had not completed it.

The Court: The interrogatories will not go in unless the answers go in.

Mr. Cunningham: I offer the answers, which are Exhibits 4-AA, 4-BB, 4-CC, 4-DD, and I point out that there is an insert as to 4-CC, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14, and an insert as to 4-DD of 1, 2, 3, 4, 5, 6, 7, 8, 9, [7] 10 and 11. I ask that those be produced, and I offer them now in evidence.

Mr. Ramsey: The numbers are meaningless because they do not appear on their list. They do not appear on their list of exhibits.

The Court: They are on the list now.

Mr. Cunningham: Your Honor, I will be glad to identify each and every one.

The Court: This should be done outside the court sessions. We are busy now. They are identified. Mr. Ramsey. Talk to Mr. Kolisch.

Mr. Ramsey: I was looking at his list and it has AA, BB, CC, DD. Now he talking about some insert numbers.

Mr. Cunningham: Look at the following page. I have had copies of it, and you have had copies of it for a week.

Mr. Ramsey: I am sorry; we didn't see on the next page.

The Court: The next two pages.

Mr. Ramsey: We have no objection.

The Court: Very well.

Mr. Cunningham: I ask that Plaintiff's Exhibits 5-A, -B, -C, -D and -E be produced. I offer them under those respective numbers.

The Court: 5-A, -B, -C, -D and -E.

Mr. Kolisch: No objection.

The Court: All right; they may be admitted. [8]

(Requests for Admission of Facts and Genuineness of Documents, dated March 7, 1955, received in evidence as Plaintiff's Exhibit 5-A;

(General Answer dated April 5, 1955, received in evidence as Plaintiff's Exhibit 5-B;

(Answer by Admiral dated May 16, 1955, received in evidence as Plaintiff's Exhibit 5-C;

(Answer by Amana, dated May 16, 1955, received in evidence as Plaintiff's Exhibit 5-D; and

(Request for Admission dated August 16, 1955, received in evidence as Plaintiff's Exhibit 5-E.)

Mr. Cunningham: Now, if your Honor please, I ask Mr. Lewis J. Bronaugh of Portland, Oregon, to take the stand. [9]

LEWIS J. BRONAUGH

a witness produced in behalf of Plaintiff, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Cunningham:

Q. What is your name?

A. My name is Lewis J. Bronaugh, L-e-w-i-s B-r-o-n-a-u-g-h. I reside at 742 Southwest Vista Avenue, Portland, Oregon.

Q. Mr. Bronaugh, what is your occupation?

A. I am an attorney-at-law.

Q. What is your present association?

A. I am a Deputy District Attorney for Multnomah County.

Q. Mr. Bronaugh, what was your occupation during the years 1928 through 1932?

A. From approximately December 1, 1928, until the end of 1931, December, I was President of the

(Testimony of Lewis J. Bronaugh.)

Potter Refrigerator Corporation, Portland, Oregon.

Q. Did you ever have any connection with the Potter Refrigerator Sales Corporation as distinguished from Potter Refrigerator Corporation?

A. I think the answer to that should be No. When I first associated myself with T. Irving Potter, the Potter Sales Corporation was in existence, but I think it would be proper to say that I had no connection with—I was not employed by the Potter Refrigerator Sales Corporation.

Q. Whom did you interview at the time you became employed [10] by the Potter Refrigerator Corporation?

A. I first contacted Mr. Irving R. Halsey.

Q. Who was he?

A. I believe he was the head of the Potter Refrigerator Sales Corporation, but my interview with him had nothing to do with that corporation. It had to do with the syndicate sales work, so-called, being carried on by Mr. Potter.

Q. Did you subsequently meet Mr. Potter?

A. Yes, almost—I think probably the first time I was ever in their office.

Q. Can you place the date more accurately than just 1928? A. I believe it was in August.

Q. Whom did you regard as your employer at that time? A. T. Irving Potter.

Q. Where was the office of Mr. Potter at that time?

A. In Suite 912, Public Service Building, here in Portland, Oregon.

(Testimony of Lewis J. Bronaugh.)

Q. Would you tell us a little bit about the general setup at the Potter Refrigerator Sales? Did they have any plant?

A. The main room was a large room, a large corner room which was 912. It was a display room containing various refrigerator cabinets and compressor units. Off to the left was Mr. Halsey's office, and off of it to the right was Mr. Potter's office. It was a three-room suite.

Q. At the time of your employment in 1928 was there any [11] factory where refrigeration equipment was being produced?

A. Mr. Potter had then, and had had for some time previously, space in the Fouch Electric Company plant down on North Ninth Street, which he used.

Q. Was that here in Portland?

A. That was here in Portland.

Q. What was the business of that company and Mr. Potter at that time, generally?

A. He was engaged in development of refrigeration equipment, design, engineering, manufacture.

Q. How long would you say he had been engaged in that activity?

A. To the best of my knowledge, it was commenced here in Portland in 1927.

Q. What type of refrigerating equipment was he interested in developing in 1928?

A. He was primarily concerned with the development of an oscillating reciprocating type of com-

(Testimony of Lewis J. Bronaugh.)

pressor differing from the conventional types in that there were no—it contained no valves. It was a ported job and operated with a——

The Court: Is that involved in this patent?

Mr. Cunningham: No, your Honor.

The Court: Mr. Cunningham, we are going to have all we can do to try this case without trying a lot of other things. I think we ought to start getting down to business. [12]

Mr. Cunningham: If your Honor please, it is not—the compressor is not involved in the patent, if that is the way I understood your question. Now, of course, how this invention was born and the background and setting is, I think, very much a part of the case.

The Court: But it does not involve the question of how much space they have in the Public Service Building. This case is going to take a long time. It is going to take a lot longer if we get off the main issues of the case. Go ahead.

Q. (By Mr. Cunningham): How long did your employment by Mr. Potter continue?

A. From approximately August, 1928, until the end of 1931.

Q. Had you had any experience in the refrigeration business before you joined the Potter organization? A. No.

Q. Did you during your employment there have charge of the shop, the manufacturing end of the business, until December, 1931?

(Testimony of Lewis J. Bronaugh.)

A. I did from approximately December 1, 1928, until the end of 1931.

Q. During all of that period were you the president of the company?

A. That is right. Qualify that: I was President of the Potter Refrigerator Corporation from the time it was incorporated, [13] which, I believe, was in February or March of 1929. My function, however, from December 1st was the same as it was after the corporation was incorporated.

Q. Just for the record, I note that the date of formation of the Potter Refrigerator Corporation was February 23, 1929, and that it continued until it was dissolved in 1935.

Did you also participate in the sales of refrigerator equipment to customers of Potter Refrigerator Corporation?

A. To some degree. We had a sales organization both retail and wholesale, and I occasionally entered into some transactions which were considerably involved, particularly in commercial equipment, in the closing of the transactions.

Q. Mr. Bronaugh, will you tell us a little more fully what your duties were as President of the Potter Refrigerator Corporation?

A. That would cover a pretty broad scope. I would say the usual duties of the head of a business of that type. It was primarily development work. Our sales were somewhat secondary and incidental, merely to prove out or primarily to prove out the

(Testimony of Lewis J. Bronaugh.)

new types of equipment that we were building. I had general charge of all of the operation from design through production through sales. [14]

Q. (By Mr. Cunningham): Now, Mr. Bronaugh, are you familiar with the type of electric refrigerator for household use which was available on the market prior to the development work that you mentioned went on by Potter?

A. I think I was very thoroughly familiar with them; I had to be.

Q. Will you describe, please, generally, the conventional-type of household refrigerator prior to the Potter development?

A. At that time the conventional refrigerator was little more than a glorified icebox in that it had a mechanical device substituted for the cake of ice which performed the same function; that is, absorbed the heat within the box and removed it thereby lowering the temperature. There were various types but they were basically alike. The chilling units varied somewhat from coils to brine tanks, to what was known as the boiler-type which contained the float valve. But, basically, they were the same and the function, the performance so far as results were concerned, were very closely alike.

Q. Will you mention some of the names of the well-known household refrigerator manufacturers?

A. Yes; General Electric, Frigidaire, Kelvinator, Copeland.

Q. And were there any others?

A. There were a good many others.

(Testimony of Lewis J. Bronaugh.)

Q. Now, were such refrigerators of conventional types adapted to preserve frozen foods similar to the Birds Eye frozen foods? [15]

A. In no respect whatsoever.

Q. May I have the answer, please?

A. In no respect whatsoever.

Q. Well, will you just explain the basis for that answer, Mr. Bronaugh?

A. Because they could not maintain a low enough temperature even when the compressor was in its operating cycle. The temperature inside the chilling unit was not low enough for frozen food preservation. Of course, in the operative period of the compressor the chilling unit warmed up until it did well if it kept ice cubes; it certainly was not a low enough temperature to preserve frozen foods. The space was inadequate, also.

Q. Now, Mr. Bronaugh, are you one of the two patentees of reissue patent 23,058? A. I am.

Q. Now, was the refrigerator of that patent adapted to preserve such frozen foods for any length of time?

A. I would say almost an indefinite period of time. I would say as well adapted as a cold storage plant in which those foods are kept.

Q. Now, returning to this conventional type of refrigerator that you were describing, was there any common characteristic in those boxes as to the formation of frost on the evaporator?

A. They all formed frost on the evaporator because of the [16] temperature being well below 32

(Testimony of Lewis J. Bronaugh.)

degrees Fahrenheit the moisture in the air in the box and the moisture contained in the food products that were placed in the box being picked up by the air circulating over the evaporator precipitated onto the evaporator and formed a coating of frost which continued to build up until the unit was shut down long enough to permit that frost to melt off.

Q. What effect did the collection of frost on these conventional old-type evaporators have on the food stored in the refrigerator?

A. Well, most of the moisture that collected on there in the form of frost came out of the foodstuffs with the result of dehydration and drying out of the foods placed in the refrigerator.

Q. Did this accumulation of frost on the evaporator in the conventional refrigerator necessitate any interruption of the operation of the apparatus for the purpose of getting rid of the frost?

A. Yes. The apparatus had to be shut down periodically for varying lengths of time to melt off that frost because the build-up of that frost blanket resulted in a progressive decrease in the efficiency of the mechanism.

You might compare it with piling blankets on top of a steam radiator in a heating plant. If you put enough blankets on there you certainly wouldn't heat the room. If [17] you get enough frost on the evaporator in the refrigerator you are not going to cool the box.

(Testimony of Lewis J. Bronaugh.)

Q. Can you give us some estimate of the frequency with which it was necessary to defrost the ordinary refrigerator?

A. That was a very variable thing, depending on the type of chilling unit, the temperature at which it operated, and the type of use of the box, the number of times the door was opened and closed, the amount of moist food products put into the box. In other words, the more moisture that you introduce into the box the faster the accumulation of frost on the evaporator.

Q. And was that true of all of the types of conventional refrigerators that you knew of prior to the advent on the market of the refrigerator of Patent No. 23,058?

A. It was, except for the Potter refrigerator.

Q. By that you mean that until the Potter refrigerator came along there was no such equipment —household equipment on the market that you knew of?

A. The Potter refrigerator was the first self-defrosting refrigerator marketed in America, to the best of my knowledge.

Q. Do you know of any such refrigerator in any other country in the world?

A. I never had heard of one.

Q. Now, what is the disadvantage from the standpoint of the user of the conventional-type refrigerator in having to defrost [18] the evaporator periodically?

(Testimony of Lewis J. Bronaugh.)

A. It's more a matter of inconvenience than anything else so far as the defrosting operation is concerned. The real detriment, of course, was the dehydration, the drying-out, of the foodstuffs.

Q. Well, what effect, Mr. Bronaugh, did the defrosting operation have on the temperature of the food that had been placed in the refrigerator for preservation?

A. I think very little if the defrosting operation was conducted with reasonable frequency. If you permitted it to build up to too thick a blanket—and I have seen this actually occur—even with the compressor running constantly you could not reduce the temperature in the box to the desired degree.

Q. What can you say with respect to the proces of defrosting as habitually carried out by users, housewives?

Mr. Ramsey: If the Court please, I have not objected to the form of questions, but it seems that that is going a bit too far, as to what you can say about this, and is this so, and they are leading.

The Court: Is this man an expert? Is he claiming he is an expert?

Mr. Cunningham: Why, yes, your Honor.

The Court: Well, he hasn't been qualified by the lawyer.

Mr. Cunningham: Well, he is, shall we say, an expert on [19] his own patent. Your Honor, he is one of the patentees. May I ask him whether he knows?

(Testimony of Lewis J. Bronaugh.)

The Court: Are you a mechanical engineer, or what kind of an engineer are you?

The Witness: I am not an engineer at all, your Honor. I am not a licensed engineer. I have worked with mechanics all my life.

The Court: Then you are not trying to qualify him as an expert?

Mr. Cunningham: Yes, I am; for the fact expert on his patent.

May I ask a few preliminary questions?

The Court: All right, go ahead.

Q. (By Mr. Cunningham): What formal education do you have, Mr. Bronaugh?

A. Well, the usual primary preparatory school and two years of college?

Q. What college did you——

A. Plus my law degree. Amherst, Massachusetts.

Q. You stated that you have always been interested in things mechanical. Can you name any other work that you did or development work you did on things other than household refrigerators, other than as shown by the patent in suit?

A. From the time I was a schoolboy I worked with internal combustion motors. [20]

Q. Now, in connection with your development work on household refrigerators did you make any effort and were you successful in such effort in observing the ordinary use of household refrigerators in the kitchen by the housewife?

A. I observed them very closely in actual usage and most certainly in our constant experimental

(Testimony of Lewis J. Bronaugh.)

work in our own plant.

Q. Do you feel that you know how this defrosting operation was habitually carried out by housewives in Portland, Oregon?

A. Very definitely.

Mr. Cunningham: May I have an answer to my question, your Honor?

The Court: Well, I know how they defrost household refrigerators, too, but that doesn't qualify me as an expert, does it?

Mr. Cunningham: I beg your Honor's pardon, I couldn't hear.

The Court: Merely because this man knows how housewives defrost their refrigerators doesn't make him an expert, because I have watched that many times myself.

Mr. Maguire: I think perhaps we are a little at sea on the inquiry. I think the inquiry started as to what time it took and what effect it took on defrosting and the amount of ice, and the question was whether he had observed and knew what the practice of housewives was in the time and interval in defrosting. [21]

The Court: Well, a man doesn't have to be qualified as an expert for that purpose.

Mr. Maguire: Well, your Honor, that isn't it. It isn't a question of whether he is qualified as an expert on that question, it's a question of whether the testimony is competent, what he saw and observed.

(Testimony of Lewis J. Bronaugh.)

The Court: That is perfectly all right. Mr. Cunningham indicated and the witness has testified as to other matters which involve matters for an expert, I thought, and I was just trying to find out whether he was claiming that Mr. Bronaugh is an expert, and Mr. Cunningham indicated that he was an expert on his own invention.

All right, go ahead.

Mr. Ramsey: May I just add one comment? On direct this witness was asked whether he had any experience in the field of refrigeration before he was employed by Potter, and he said, "No."

The Court: But I think that, as I pointed out, you don't have to be an expert, you merely have to observe what happens to household refrigerators when you turn the juice on. Go ahead.

Mr. Cunningham: May we have the question read, your Honor?

The Court: You will have to ask the question over again; it's a long time back.

Mr. Cunningham: Well, I will attempt to ask the question. [22] I have forgotten the exact phraseology; that's the reason I asked to have it read.

Q. Can you state, Mr. Bronaugh, what the effect was on the temperature of the food in this defrosting operation as it was habitually carried out by the very normal and able housewives of Portland?

A. The temperature of the box would rise and, I think, in most cases would become room temperature. In other words, to accomplish the defrosting

(Testimony of Lewis J. Bronaugh.)

operation the air inside the box had to be warmed up sufficiently to melt off that frost and if the frost blanket had been accumulating for two or three weeks it took a very considerabi period of time to do it. It could be accelerated, of course, if they put trays of boiling water inside of the chilling unit. That was true of the coil type. It had very little effect on the brine tank or boiler type. About the only way that those could be defrosted was by prolonged shutdown and an opening of the doors of the refrigerator.

It was customary for housewives to take the foodstuffs out of the refrigerator during the defrosting process.

Q. Do you know whether it has any deleterious effect on frozen foods to allow them to thaw?

A. They cannot be refrozen and restored to their former condition.

Q. By "condition" you mean they cannot safely be restored—— [23]

A. They cannot be restored to their former condition by freezing.

Q. Now, Mr. Bronaugh, I show you and I offer in evidence as Plaintiff's Exhibit 16-A the chart that is mounted on this easel.

Can that be moved nearer the witness and nearer the jury?

Mr. Ramsey: No objection.

The Witness: May I leave the chair for the purpose of——

(Testimony of Lewis J. Bronaugh.)

Mr. Cunningham: Maybe if you move it farther back it would be better.

The Court: Move it into the center.

Q. (By Mr. Cunningham): Now, Mr. Bronaugh, will you, in your own words, and with the aid of a pointer if we have one in the room, explain in general the operation of this construction and what that drawing shows to the jury?

A. If I understand your question, Mr. Cunningham, you want me to describe the refrigerator diagrammatically shown by this drawing?

Q. Yes. And may I ask you first: Is that a drawing of the refrigerator of your patent in suit?

A. It is.

Q. Will you please go ahead?

A. The box itself would appear in general as any other refrigerator. It would be made up of a metal covering, wood [24] covering, whatever it might be. The major difference in appearance is the fact that there was an upper and lower door. The roughed-in material shown in this drawing (indicating) is insulation. Note that there is a uniform thickness of insulation around the upper compartment which was the fresh foods compartment and heavier insulation around the lower compartment which was the freezer and frozen storage compartment.

In the fresh foods compartment there was a finned coil back of a baffle plate, the coil consisting of a single line of copper tubing extending through aluminum fins that were extruded for the cooling

(Testimony of Lewis J. Bronaugh.)

so as to provide a very tight fit and a good metallic contact for purposes of heat transmission. The temperature control, we happened to use what was known as a time-o-stat which was affected by the temperature of the box actuating a mercury switch which turned the compressor unit down here (indicating) on and off.

In the cold storage compartment and freezing compartment this was a brine tank, these were ice cube tray inserts, and this was an open space with flanges to permit the insertion of a shelf (indicating).

Down here (indicating) is the compressor unit, the machine; the pump does the work. Running from the receiver is a fluid line containing a refrigerant leading up to and through the coiling in the brine tank and then on up and into the tubing in the finned coil in the refrigeration [25] compartment and then returning through the line down the back of the refrigerator to the pump, the refrigerant circulating by the suction action of the pump. In normal operation this compartment operated at 40 degrees (indicating). This freezer compartment—I am speaking of Fahrenheit—this freezer compartment operated at minus 10 Fahrenheit, 10 degrees below zero. This compartment (indicating) operated at 10 degrees above zero. I say they "operated" at that—we ran tests, of course, under actual operating conditions and under conditions of our normal experimentation with recording thermometers recording the temperature day after day, and they oper-

(Testimony of Lewis J. Bronaugh.)

ated very closely to those temperatures as shown by the charts on the mounts.

There was no frost on the fins of this coil (indicating), never under any circumstances. There was no dehydration of foodstuffs. The atmosphere in this compartment had 100 per cent saturation. It contained all the moisture that the air could contain at the temperature existing so that there was absolutely no dehydration of foodstuffs; there couldn't be. [26]

We put fresh foods in here, both lettuce and spinach, and saw it coming back up to a fresh condition again because there was more moisture in the air in there than there was outside in the air in which this stuff had been lying in the market.

The temperature in the freezer being approximately minus 10 degrees, there was no adhesion of the ice trays. One of the things that intrigued people was, when they first saw this, was the fact that you could flip an ice cube tray in and out with your finger. It could not adhere. This compartment would keep frozen food for an indefinite time, the temperature being approximately that at which it is kept in the markets.

Any further questions?

Q. I do not recall.

A. I tried to give a general picture of what it is.

Q. It is very hard to remember each and every detail, is it not?

A. I remember the details, but how far to go into details is——

(Testimony of Lewis J. Bronaugh.)

Q. I wonder if you did mention anything about insulation of these compartments, how that co-operated with the whole combination?

A. In our designing and building of this unit, of course, this was the result of a long, long period of experimentation, [27] a great deal of work that went on before and the building of experimental jobs, some of them very crude, and we learned as we went along. Then when it came to building the finished article, of course, there is a matter of heat inflow into the box that you have to take out because of the differential between the inside and the outside temperature of the room. That inflow is calculated from B.T.U., British thermal unit tables that are used in refrigeration engineering, and you could tell very closely with a given temperature differential, say 40 inside and 70 outside, the rate of heat flow through into that, so you built your insulation in an insulating wall around that to retard that heat flow and keep out as much of it as you could within reason.

Now, the temperature, we may say in here was 40 and the average temperature outside was 70 or 75. We computed the amount of insulation we needed for, say, a heat barrier within practical limits, and, as I recall, we used two inches of insulation in the upper compartment. Now, because there was a greater differential at minus 10 and plus 10 and this same 70 and 75 degrees outside——

Q. Referring now to the lower compartment?

A. That is right; you have a much more rapid

(Testimony of Lewis J. Bronaugh.)

flow of heat from outside into that so you have to build a thicker heat barrier or use thicker insulation to proportionately retard [28] that heat flow.

If you have a differential, say, of 75 or 80 degrees, you are going to have a very rapid heat flow through this hot air trying to spill into that low temperature, and you have to build a heavy wall, and then, as I recall, in this we used four inches of insulation; only two inches here because we have very little differential, only about 40 degrees, between the upper compartment and the lower compartment.

Q. Is that, Mr. Bronaugh, back of this center partition which seems to be labeled, 33, what we know—anyhow, the dividing wall between the upper and lower compartments, is that exposed to the ambient temperature of the room?

A. Not at all. The only heat flow you have would be from the approximate 40-degree area to the approximate zero area.

(Discussion off the record.)

Mr. Maguire: May I make a suggestion. I notice in both the questions and answers they say "here" or "there," but for the record it will not get what particular portion is being referred to.

The Court: Thank you, Mr. Maguire, for your suggestion.

Q. (By Mr. Cunningham): What is designated by the numeral 23, I believe it is here?

A. 23 appears to be the designation of the copper tubing [29] that runs around through the brine tank

(Testimony of Lewis J. Bronaugh.)

to reduce the temperature of that brine to the approximate minus 10 degrees Fahrenheit that I mentioned before.

I might add there by way of explanation, the refrigerating mechanism does not generate cold; it absorbs heat.

Q. I think there may be an error there, Mr. Bronaugh. 23 is described in the patent as an expansion valve.

A. Well, diagrammatically you cannot tell what it is.

Q. Will you tell us, assuming that is an expansion valve, will you tell us what the function of the expansion vaive was?

A. The expansion valve is a variable restriction orifice. In the machine we have methyl chloride. Methyl chloride boils normally at minus 10 degrees. That is, it will vaporize at 10 degrees below zero at atmospheric pressure. The only way you can keep it liquefied is to keep it under pressure because temperature and pressure invariably go hand in hand. They never depart from a fixed relationship. In order to keep a liquid that will boil in minus 10 degrees in liquid form, you have got to raise the pressure up to the, let us say, 75 pounds per square inch instead of 15 pounds atmospheric pressure. This is not an exact. I am simply using it for purposes of illustration. [30]

Now, to permit that liquid to absorb heat we convert it into a gas, and it is the absorption of heat

(Testimony of Lewis J. Bronaugh.)

by that liquid that does gasify it. The liquid passes through the copper tubing up here from there—this happens to be Figure 23 to illustrate it—to a restricted opening. Now, that can be merely a very small orifice. You could have a quarter-inch tubing leading to a fitting that had a hole in it, let us say, ten-thousandths of an inch in diameter, and that would permit the liquid to flow through but at a very slow rate because of the minute size of the opening, and the minute that liquid passed through into the lower pressure on the other side of that restriction orifice it gasifies because it absorbs heat in the air.

The expansion valve is just a restriction orifice but an adjustable one so that you can vary the size of it. It works like the needle value in the carburetor of your automobile, and by turning that needle valve in or out you can enlarge or diminish the opening and permit a greater or lesser amount of gasoline to pass through. The expansion valve in the refrigerator does the same.

Q. How about the capillary tube, is that another example? A. Yes.

Q. Does that perform virtually the same function as the expansion valve?

A. Yes, any means of restricting the exit of the liquid [31] from the high-pressure area to a low-pressure area would be termed, I think, an expansion valve. At least, the function, the result would be the same.

Q. Mr. Bronaugh, in explanation of our former

(Testimony of Lewis J. Bronaugh.)

mistake on the numbers, I notice that 22 refers to the tubing. A. Copper tubing.

Q. And No. 23, which does look as though it is on the tubing, refers to the expansion valve.

Can you tell us just the path of the refrigerator, and, adopting Mr. Maguire's suggestion, I think you might use the reference numerals appearing on Exhibit 16-A, starting with the compressor, let us say, and making a complete circuit?

A. I will start with the electric motor which is designated here as 16. It is connected to the compressor by a belt running around the fan wheel of the compressor, and this compressor is just a pump to create a suction. As the pistons work up and down in there they are pulling on the suction line pulling the gas out that is created by the conversion of this liquid refrigerant due to the absorption of heat within the refrigerator, and there is a—I should have started probably at the end—here is a steel tank known as the receiver which is the tank containing the liquid refrigerant under pressure so that it is kept in a liquefied form. This tubing line is shown here as No. 24. [32]

Q. Are there arrows there pointing——

A. The flow of that liquid is up through that tubing.

Q. Is that shown by the arrows?

A. Shown by the arrows, but that tubing extends on into this brine tank.

Q. Through the expansion valve?

A. Through the expansion valve.

(Testimony of Lewis J. Bronaugh.)

Q. And into the tubing in the brine tank?

A. Into the tubing in the brine tank, the tubing 22 shown as coiling around these various openings.

Q. What is a brine tank?

A. A brine tank is any metallic tank containing what is termed a brine which is merely water to which something has been added so that it will not freeze at the temperature at which you are operating. When you put your antifreeze in your automobile radiator you are to some sense creating a brine tank because you have injected something that will keep it from freezing. In here we use an alcohol, sufficient alcohol in the water in that brine tank so that it would not freeze at the temperatures at which we operate.

Q. Now, sir, where does that refrigerant flow from the brine tank 19 through——

A. In our tubing 22 on up through a tubing line —I cannot trace the designations——

Q. The photostat has been overenlarged, I am afraid. That [33] is all right; can you see the point to which it should go there?

A. It is shown here as this dotted line coming up—coming on up through the food compartment and into the coil in the fresh foods compartment.

Q. Can you tell us a little bit about that coil which is designated Figure 25, I believe, in Fig. 2 and 25 in Fig. 1?

A. That coil consisted of single rows of copper

(Testimony of Lewis J. Bronaugh.)

tubing in that form. There are 1, 2, 3, 4 single lines just like that ruler when laid on there of the copper tubing extended similarly.

Q. I notice that is partly in solid and partly in dotted lines. Could you explain to the jury why that is so in Fig. 1?

A. I don't know that I could. I do not know whether I understand the question.

Q. Maybe I can help you a little. Is there something in front of——

Mr. Byron: May it please the Court, I suggest——

The Court: That objection is sustained.

Mr. Byron: Who is the witness here?

The Court: Yes, bring another witness to explain, Mr. Cunningham.

The Witness: I failed to understand the import of Mr. Cunningham's question. There is a baffle plate in front [34] of that coil. I referred to that a while ago.

Q. (By Mr. Cunningham): The baffle plate is at 28?

A. The reason for the baffle plate is, in the first place, to cover up the coil and give the box a better appearance and also to accelerate the circulation of air.

Q. Is that baffle plate shown more clearly in Fig. 2?

A. The baffle plate is shown here as 28 with the drip connection 29 down at the low end. It would slope a little bit down at the low end to the piece of

(Testimony of Lewis J. Bronaugh.)

copper tubing to prevent the drip of moisture that collected in the drip trough at the bottom of this baffle plate, the moisture that came down off of the coil, and that in turn was caught within a milk bottle or some container.

Q. Is that milk bottle designated as No. 30, Fig. 1? A. Yes; very, very little of it.

Q. Now, is the finned coil 25 shown in Fig. 2 at right angles to that as shown in Fig. 1——

Mr. Byron: May it please the Court, this witness—we object to that. We are willing to be kindly about an examination, but we do not believe that any attorney on a direct examination should ask leading questions, especially of a man who has knowledge, who is supposed to know about his own device.

Mr. Cunningham: I withdraw the question, your Honor.

The Court: Very well. [35]

Q. (By Mr. Cunningham): What can you say about the structure of the coil 25?

The Witness: I believe, Mr. Cunningham, I described it earlier in my testimony as a finned coil and described the construction of it, the fact that the copper tubing ran through aluminum fins that were extruded so as to provide a very tight fit around the copper tubing, and then there was a good metallic contact and a good heat-transmission unit.

Q. Is this device that you have characterized a finned coil, is that shown and designated by 25 in both figures? A. Yes.

(Testimony of Lewis J. Bronaugh.)

Q. Now we have the refrigerant up to the finned coil. Can you complete the circuit for us?

A. The refrigerant continues on up through what is termed the liquid line, through the finned coil, and connected, I would say, to the exit side or end of that finned coil is a larger tubing. This liquid line carrying liquid is a very small tubing, quarter-inch. The line coming off, which has to handle gas, is larger.

Q. You are referring now, are you not, to the upper right-hand corner of Fig. 1?

A. Yes, I am trying to find some numerical designation that I can use, but I don't see anything to describe it. I will trace it on the chart. The line comes out of the top of the [36] finned coil and extends on down through the box into the compressor compartment and then to the compressor itself.

Q. This is where we came in, isn't it, Mr. Bronaugh, in this cycle? A. I believe so.

Q. Mr. Bronaugh, while you are on your feet, will you cast your eyes in the direction of the refrigerators——

The Court: Well, I think we will take our morning recess now until 11:00 o'clock. You are now excused for about 12 minutes, members of the jury.

(Thereupon the jury retired for the morning recess.)

The Court: I will say to you, Mr. Cunningham, that in spite of the fact that you did not qualify Mr. Bronaugh as an expert he did testify as an ex-

(Testimony of Lewis J. Bronaugh.)

pert for a considerable length of time not only on refrigeration but on the effect on frozen food. He has definitely stated that you cannot refreeze any food that has once been permitted to thaw out. That may be true or it may not be true, but I do not think that Mr. Bronaugh is in a position to make those statements. I did not stop him because there was no objection to it, but in spite of his lack of qualifications he is testifying to a lot of things about which he cannot possibly testify as an expert. I call that to your attention. We will recess until 11:00 o'clock. [37]

(Morning recess taken.)

(Thereupon, at 11:00 a.m., the jury returned to the jury box and the following proceedings were had:)

The Court: Mr. Bronaugh, Mr. Cunningham wanted you to look at that refrigerator.

Mr. Cunningham: May I ask him a question first, your Honor?

The Court: Proceed.

Q. (By Mr. Cunningham): Mr. Bronaugh, we neglected to ask you about this little device, 31. What is that?

A. I described that, I believe, in my testimony, Mr. Cunningham, as a time-o-stat temperature control.

Q. I merely wanted to identify it.

What part does that play in the operation of your combination?

A. That device consists of what is known as a

(Testimony of Lewis J. Bronaugh.)

bimetal coil. A bimetal coil is a strip of metal, two pieces of metal of different heat relationships that are adhered together and then coiled up, and the temperature of the air on that coil causes it to try either to tighten up or open up, and as it tightens up it closes, and as it tries to open up, due to warming, turns the other way, and that turning action actuates a mercury tube connected to the electrical circuit, the mercury in that tube forming the contact and closing [38] the circuit just as though you pushed a switch in the wall. When the tube is tipped down, the mercury is in contact with the two poles connected to that tube and closes the electrical circuit and causes the compressor to operate. When, due to the warming up and the tendency of this bimetal coil to open up, the tube is tipped the other way, the mercury is tipped down in the other end, and the circuit is broken just as if you pushed the "off" switch in a wall switch, and you break the circuit and close down the compressor.

Q. Mr. Bronaugh, if you will take a walk with me and tell me whether or not you see any refrigerators that are old friends in this room——

A. The refrigerator against the wall behind the third coat rack is the refrigerator that was built from this drawing that I have just described.

The Court: Take the refrigerator out. Could you do that?

Mr. Cunningham: I do not think that is the function of Counsel, your Honor.

The Court: I was going to say that during the noon hour we are going to have all of those re-

(Testimony of Lewis J. Bronaugh.)

frigerators moved on this side of the wall (indicating) and these benches removed, and it might be easier. Can you delay the question until that time?

Mr. Cunningham: Your Honor, I merely want to identify [39] what he has already testified about, and it is Plaintiff's Exhibit 11-A, and I offer it in evidence.

Mr. Ramsey: No objection.

The Court: I think all of the refrigerators have been admitted in evidence. It is already in evidence.

Mr. Cunningham: That is not my recollection, your Honor.

Mr. Kolisch: Yes, it was admitted yesterday, your Honor.

The Court: Mr. Bishop has called my attention to the fact that they are all in.

Mr. Cunningham: This does not have to be removed, and by "this" I mean 11-B.

The Court: Does not have to be removed?

Mr. Cunningham: Moved.

The Court: Mr. Cunningham, I said this afternoon we are going to have all of those others moved on this side so they will all be on one side, and then the jury can see it without having to leave the jury box.

Mr. Cunningham: Yes, your Honor, that would be very helpful, but can I now refer to 11-B and ask Mr. Bronaugh if he recognizes that?

The Court: Certainly; go ahead.

Q. (By Mr. Cunningham): Will you answer the question, Mr. Bronaugh? [40]

(Testimony of Lewis J. Bronaugh.)

The Witness: This refrigerator was built by the Potter Refrigerator Corporation here in Portland, Oregon, in 1931.

Q. Did you have anything to do with the building of it?

A. Everything except the actual physical structure. It represented, you might say, the finished result of a long period of experimentation, many crude models built before we built this metal covering in order to have a piece of merchandise that could be sold to the housewife for use in the home, and it incorporated the ideas that we had been working toward.

Q. Does that embody all of the features of the patent in suit, and I direct your attention to the empty lower cabinet.

A. That does embody all of the features of the patent in suit.

Q. How about the compressor motor? How about the compressor, the motor?

A. There is nothing in the compressor compartments. There would normally, of course, have to be a compressor that was shown in the drawing. The rest of it is here, the brine tank we were discussing, then the cold storage compartment, and this is the fresh foods compartment.

Q. Referring to the upper compartment now?

A. Referring to the upper compartment.

Q. The brine tank is in the lower? [41]

A. The brine tank is in the lower compartment.

Q. Go ahead.

(Testimony of Lewis J. Bronaugh.)

A. This is the baffle plate that we were talking about, in front of the coil.

Q. At the rear of the upper compartment?

A. At the rear of the upper compartment. Behind that is a finned coil. The fins are not visible from the jury box, but they are there and show about three-quarters of an inch of their length projecting above the baffle. In the upper right-hand corner, the upper compartment, is the time-o-stat temperature control that we were discussing. The tubing lines, of course, are concealed. They run through the back wall of the cabinet, and the expansion valve that we were talking about is also located in the back wall of the cabinet with a plate on the rear wall to permit access to the expansion valve for adjustment.

Q. Would you take a look at the first refrigerator and tell me if that does not correspond in all respects? By that I mean Exhibit 11-A.

A. I know that refrigerator thoroughly without walking over there, Mr. Cunningham. I know exactly what it is because I built it.

Q. Do you find the same elements?

A. The same elements. The only difference you will find between that refrigerator and this one is that this is, has [42] a tin-copper brine tank where that had a galvanized metal. This has only three openings, for trays, where that one had five or seven. The only difference between that is in the trim around the doors which in that is wood and in this is some Bakelite material or something for better

(Testimony of Lewis J. Bronaugh.)

appearance and durability. Otherwise they are the same. This is a little bit more finished product. That was the first metal-covered box we built.

Q. By "that" you mean 11-A?

A. 11-A, the first metal-covered box to incorporate this invention that we built in Portland, and these were built shortly after that first one.

Q. Mr. Bronaugh, did you at any time become familiar with a patent to a Mr. Anderson, No. 1,439,051? A. Yes, I did.

Mr. Cunningham: I offer in evidence Plaintiff's Exhibit 16-B, a chart of the drawing of the Anderson patent.

The Court: Is there any objection to the Anderson patent?

Mr. Ramsey: No objection.

The Court: It is admitted.

(Chart of Anderson Patent previously marked Plaintiff's Exhibit 16-B for Identification was received in evidence.)

Q. (By Mr. Cunningham): Can you see that chart from the [43] witness stand?

A. Yes, sir. You need not turn it quite so much if that is turned a little bit too far for the jurors.

Q. Are there three compartments shown in this diagram?

A. Yes, there are: The compressor compartment in the lower left portion of the cabinet, a freezer compartment in the lower right section of the cabinet, and a fresh foods compartment in the upper portion of the cabinet.

(Testimony of Lewis J. Bronaugh.)

Mr. Ramsey: If the Court please, may I object —is he now talking and testifying as an expert, a patent expert?

Mr. Cunningham: He is explaining, your Honor, a patent with which he is familiar, for the aid of the Court and the jury, in his own language and with the devices made under the patent with which he is familiar.

The Court: I think you had better have Mr. Parker do that. You have Mr. Parker. He is an expert, an admitted expert, and I think he ought to do it.

Mr. Cunningham: This is not expert testimony, your Honor. This is the testimony as to what this man's experience has been with this Anderson patent. It is fact testimony. I submit, your Honor, that always is admissible.

The Court: He is explaining the fact.

Mr. Cunningham: No, your Honor.

The Court: I am ruling that it is not admissible, Mr. [44] Cunningham, and he is not going to testify to it.

Mr. Cunningham: That is, he cannot explain what he knows about the Anderson device from his experience and its background for his invention, your Honor? It shows what the invention was. There could be nothing more vital.

The Court: Mr Cunningham, I ruled [45] already.

Q. (By Mr. Cunningham): Mr. Bronaugh, you testified, I believe, that you were the patentee, joint

(Testimony of Lewis J. Bronaugh.)

inventor, of the patent in suit, Reissue No. 23,058 and of this original Patent No. 2,056,165. What can you say with respect to the combined efforts of yourself and Mr. Potter in connection with the invention of these patents? Did you co-invent?

Mr. Ramsey: I object, if the Court please, to the question of "co-invent." It is terrifically leading and it invades the province of the Court and jury.

The Court: Well, is that in issue here? Have you put in issue the question of whether Mr. Bronaugh was a co-inventor?

Mr. Ramsey: It goes more to the question of form. We have no objection as to his testifying what he did, how he did it, with whom he worked; but not saying "in what connection are you a co-inventor."

Mr. Cunningham: It is in issue, your Honor.

The Court: All right. Well, he is objecting to the form of the question and not to the information sought to be elicited. You can tell what you did in connection with the development of this patent.

The Witness: Mr. Potter and I worked very closely together on everything we were doing from the very beginning. We had a common habit of thinking out loud and thinking with a pencil. Neither one of us could think very well without it, and whenever we sat down across the desk from each other we each had a [46] piece of paper and we just automatically sketched out our ideas for purposes of illustration. We would bat them back and forth, tear them apart, disagree, and finally

(Testimony of Lewis J. Bronaugh.)

decide, "Well, we will do this or we won't do that; this is worth trying or it isn't." We very seldom discarded anything without trying it. We did that constantly, repeatedly, and continuously throughout my association with him, and everything that we did, I would say, represented our joint efforts and largely resulted from the uninhibited joint discussion that we indulged in.

Q. (By Mr. Cunningham): Do you know whether any of these pencil drawings were preserved?

A. I doubt very much if they were. I have always been a great user of File 13, that round filing cabinet on the floor, and that's where most of them were deposited once they served their purpose.

Mr. Cunningham: Now, we have some exhibits, your Honor. It may take a little time to get some of these out. I think it will speed the examination if we call for the exhibits under Mr. Bronaugh's name. Mr. Cheatham has it here.

The Court: All right. Who has them?

Mr. Cunningham: Mr. Cheatham has them.

The Court: Who has the exhibits?

Mr. Cunningham: While we are waiting for that, your Honor, do you recall, Mr. Bronaugh, the very first effort to build [47] anything along the lines to try out your ideas, yours and Mr. Potter's, as resulting in this patented device?

A. Yes, I do.

(Testimony of Lewis J. Bronaugh.)

Q. What was the very first thing that you now recall?

A. The sessions with a pencil and a piece of paper.

Q. And what was the first physical thing that you had in your possession to try out any of your ideas?

A. That would be impossible for me to say; it's a long time ago.

Q. I am merely asking what your present recollection is.

A. As I recall, the first attempt we made to physically create what we had been creating on paper with a pencil to incorporate the ideas that we were working with was to take an old icebox and shove a slab of Fir-Tex insulating material vertically so as to divide the compartment in the icebox; the, oh, ice cubicle had been taken out of it so that it was just one big opening; we shoved a slab of Fir-Tex in it vertically so as to divide it vertically into two compartments, and in one of those we rigged up some coiling for the fresh foods compartment and in the other, a brine tank, or it might well have been one of the Potter-type evaporators that we were using in our household cabinets. But, anyway, something in there, one or the other, to provide the low temperature that we wanted to obtain on that side. And we connected a compressor and started it in operation and took tests and readings [18] of temperatures, watched it, made changes and adjustments.

(Testimony of Lewis J. Bronaugh.)

In connection with that we also explored the so-called cold wall idea in which the fresh foods compartment and the freezer compartment were both cooled by brine tanks in the fresh foods compartment, the brine tank forming the wall of the compartment and being of such large area that it did not have to operate at a very low temperature in order to produce an approximate 40 degrees temperature in that compartment. It was being used—that principle was being used by other makers—at least one other maker—of household refrigeration. We thought it was worth exploring.

We tried it out and shortly discarded it because of the condensation of moisture on those walls dripping down on the bottom of the box was always wet, we didn't think it was a desirable condition so we abandoned that and developed—devoted our entire efforts from there on to the finned coil concept of cooling that fresh foods compartment.

After we had run tests for a very considerable period of time, a good many months, I had a refrigerator built, an unfinished wooden box with an upper compartment for the fresh foods which we installed a fin coil into and a lower compartment consisting of a brine tank and a companion open storage space adjoining, with insulation in general as I explained it from the drawing of this box a while ago, proportioned in relation to the relative heat inflow to the [49] fresh foods compartment and the cold storage and freezer compartment.

(Testimony of Lewis J. Bronaugh.)

We ran that for a long time up in our experimental room, and later down on the main floor, the rear of the main floor of the factory building we were operating. That was not self-contained. The compressor set on the floor beside it. It was purely an experimental phase of our operation. We weren't concerned with appearance or anything. We ran that for a long time and took constant readings of temperatures, we inserted foodstuffs, we checked the freezing of the freezer compartment, the cold storage ability of the cold storage compartment using frozen foods, steaks, and chops, and things that were then produced by Swift & Company and frozen chickens, to see what the box would do, how well it would do the things we were aiming at.

We put fresh foods in the fresh food compartment, we put in celery, lettuce, on the open shelves with no protection, no covering. We would take cup custards and put them in to see how much shrinkage and discoloration we would get. We satisfied ourselves we had literally no dehydration of foodstuffs at all.

We found that the temperatures we were aiming at were very constant in relationship. On the circular charts of the recording thermometers the ink line would be almost a constant, with hardly any waiver at all right on the [50] temperature at which we set the box to operate.

That same was true in the cold storage compart-

(Testimony of Lewis J. Bronaugh.)

ment. There was very little variation there. We were satisfied by that time that we had what we were shooting at.

Q. Mr. Bronaugh, I show you some tracings and photostats. May I handle them, because I have to get the identification off them.

The Court: What numbers are they?

Mr. Cunningham: Sorry, your Honor.

Mr. Cheatham: What numbers are they?

Mr. Cunningham: Oh, I would like and would prefer to give them to you in order, if I may, your Honor, and I think I can. They have been marked Plaintiff's Exhibits 3-UU. That is two U'S, not a W.

The Court: Two U's?

Mr. Cunningham: 3-VV, 3-YY. Before that should go 3-WW.

The Court: Well, I will tell you. Are you offering them?

Mr. Cunningham: I am, your Honor.

The Court: Show them to whoever is going to take a look at them. Mr. Kolisch, take a look at them.

Come over here, Mr. Kolisch, and take a look at them.

Mr. Cunningham: 3-YY and 3-ZZ, 3-AAA, 3-BBB, 3-CCC, and 3-DDD.

The Court: Are they advertisements? [51]

Mr. Cunningham: No, your Honor.

The Court: Oh, I thought I saw one of them.

(Testimony of Lewis J. Bronaugh.)

Mr. Kolisch: No objection to Exhibit 3-AA—-AAA, 3-BBB, 3-CCC, 3-DDD.

The Court: Is that all you are asking for are those four exhibits?

Mr. Cunningham: No, your Honor; there are some others. Are there only four?

Mr. Kolisch: 3 double——

The Court: 3-VV. There are two U's, he said. Double V.

Mr. Kolisch: 3-UU, 3-VV, 3-WW, 3-YY, 3-ZZ. No objections.

The Court: They are admitted, Mr. Cunningham.

(The documents, having been previously marked for identification, were received in evidence as follows: Potter Deposition Exhibit 7—Plaintiff's Exhibit 80 in S.W. case, as Plaintiff's Exhibit 3-UU; Potter Deposition Exhibit 8—Plaintiff's Exhibit 75 in S.W. case, as Plaintiff's Exhibit 3-VV; Potter Deposition Exhibit 9—Plaintiff's Exhibit 76 in S.W. case, as Plaintiff's Exhibit 3-WW; Potter Deposition Exhibit 10—Plaintiff's Exhibit 77 in S.W. case, as Plaintiff's Exhibit 3-YY; and Potter [52] Deposition Exhibit 11—Plaintiff's Exhibit 78 in S.W. case, as Plaintiff's Exhibit 3-ZZ.)

Mr. Cunningham: Now, would you hand them to the witness, please?

(Whereupon the bailiff handed the aforementioned exhibits to the witness.)

(Testimony of Lewis J. Bronaugh.)

Q. (By Mr. Cunningham): I believe, Mr. Bronaugh, you are now being handed the drawings and tracings about which I will make inquiry, and I think you will find the number that I will refer to clearly marked on the drawings. Can you find 6-LL?

The Witness: What is your exhibit number, Mr. Cunningham?

Mr. Cunningham: 6-LL. There are so many exhibit numbers on those it will be confusing.

The Witness: If you will refer to them under the numbers in which they were just admitted, I believe I could find them.

Mr. Cunningham: Oh. 3-VV. Mr. Cheatham has corrected me.

The Court: There isn't any 3-BB; it's 3-BBB.

Mr. Cheatham: V as in "violent."

Mr. Cunningham: V as in "very."

The Witness: I have it, Mr. Cunningham.

Q. (By Mr. Cunningham): Will you also at the same time locate 3-WW? [53]

A. I have that also.

Mr. Cunningham: Now, is it my understanding, your Honor, that all of my exhibits have been received in evidence?

The Court: That's right.

Q. (By Mr. Cunningham): Are those drawings of the refrigerator cabinet exemplifying the cabinet of Reissue Patent 23,058?

The Court: I want to make this clear, that only the exhibits which you just offered here are admitted, not all of your exhibits.

(Testimony of Lewis J. Bronaugh.)

Mr. Cunningham: I meant only to identify them on the record.

The Witness: Plaintiff's Exhibit 3-VV is a blueprint constituting a working drawing from which that refrigerator cabinet—I don't know—recall your exhibit number.

Mr. Maguire: 11-B.

The Witness: That cabinet, Plaintiff's Exhibit 11-B, was constructed. Plaintiff's Exhibit 3-WW is a detailed drawing primarily of the door construction, but having also details of wall construction and insulation incorporated in that same cabinet.

Q. (By Mr. Cunningham): Can you tell us the date of those drawings, both of them?

A. Plaintiff's Exhibit 3-VV is dated July 26, 1931. The same date appears on Plaintiff's Exhibit 3-WW.

Q. Can you tell us by whom they were made, Mr. Bronaugh? [54]

A. I cannot tell you from—by whom they were made from reference to them, but I know who made them because they were made under my personal supervision and I watched the drawing of them. They were made by an architect by the name of Gifford, a friend of mine whom I hired as a draftsman after Mr. Bale was no longer with us as our engineer and draftsman.

Q. That is Mr. Charles W. Bale?

A. That's right. My memory is very positive because——

(Testimony of Lewis J. Bronaugh.)

The Court: Mr. Bronaugh, just answer the questions.

Q. (By Mr. Cunningham): Were these drawings made at or about the dates they bear?

A. I assume so from the date that is on them. I could not personally recall at this time.

Q. Are there any apparent changes or erasures on those drawings since the date that is on them as far as you can tell?

A. Not so far as I can tell.

Q. Where were they made, Mr. Bronaugh?

A. They were made in the drafting room of the Potter Refrigerator Corporation at 9th and Flanders in Portland, Oregon.

Q. Now, would you refer to Drawing No.—Exhibit No. 3-YY. A. I have it.

Q. I will ask you to take another drawing, 3-AAA. A. I have it.

Q. Can you identify both of those?

A. Plaintiff's Exhibit 3-YY is a drawing of the [55] three-temperature Potter cabinet made by Charles W. Bale under my direction and supervision, dated March 3rd, 1931.

Plaintiff's Exhibit 3-AAA is a drawing of a brine tank and baffle plate for the Potter three-temperature cabinet made by Charles W. Bale and dated also March 3rd, 1931.

Q. Do you know whether those were made on or about the date they bear?

A. I assume so. Mr. Bale dated them and they bear his engineering stamp, his registry stamp.

(Testimony of Lewis J. Bronaugh.)

Q. And how is their condition compared today?

A. As far as I can tell they are just as when they were made.

Mr. Ramsey: Might I make a suggestion, if the Court please? It might save more time if they would just submit them to us and we might stipulate, to move along a little faster.

The Court: Well, they are almost all in now.

Mr. Cunningham: Your Honor, we are not trying to consume time, but it does take time to get these exhibits straight. There are several, as your Honor knows. I wish I knew a better way of doing it. I am doing the best I can.

The Court: They are already in evidence, you know. I might call that to your attention.

Mr. Cunningham: They are all in evidence?

The Court: The ones——

Mr. Cunningham: Yes.

The Court: ——that this witness has talked about. They [56] are all in evidence and were before he ever described them.

Q. Will you please find Exhibits 3-BBB, 3-CCC and 3-DDD, and when you do tell us what each of them relates to?

The Court: The exhibits speak for themselves, do they not, Mr. Cunningham? How about that, Mr. Maguire?

Mr. Maguire: I am not familiar with those exhibits, your Honor.

Mr. Cunningham: Some of them do; some of

(Testimony of Lewis J. Bronaugh.)

them do not, your Honor. For instance, well, it depends on the skill, I suppose, in these details, the skill of the person to whom they are presented.

The Court: Let him testify.

The Witness: Plaintiff's Exhibit 3-BBB is a drawing, detail drawing of the brine tank for the Potter three-temperature cabinet. It bears date of January 29, 1931, and carries the engineering registry stamp and initials of Charles W. Bale.

Plaintiff's Exhibit 3-CCC is a detail drawing of the finned coil that was used in the fresh-foods compartment of the Potter three-temperature cabinet. The drawing is dated January 30, 1931, and bears the initials and registry stamp of Charles W. Bale.

Plaintiff's Exhibit 3-DDD is a door detail drawing of the door construction of the Potter three-temperature cabinet, bears date of February 7, 1931, and also the [57] initials and registry stamp of Charles W. Bale.

Q. I show you, Mr. Bronaugh, photographs, the first of which is marked Exhibit 6-GG and the second 6-HH. Can you tell us what those show?

A. Plaintiff's Exhibit 6-GG is a photograph of one of the metal-covered Potter three-temperature cabinets that we built in Portland, Oregon, in 1931, and physically exemplified by the box over there at the left hand of that row (indicating).

Plaintiff's Exhibit 6-HH is a photograph of the same box with both of the compartment doors open showing the interior construction and arrangement.

(Testimony of Lewis J. Bronaugh.)

The Court: Are you offering them?

Mr. Cunningham: I offer them, your Honor.

The Court: Is there any objection?

Mr. Kolisch: May I see them? We have never seen them.

(Photographs presented to Mr. Kolisch.)

Mr. Kolisch: No objection.

The Court: They may be admitted.

(Photographs previously marked Plaintiff's Exhibits 6-GG and 6-HH for Identification were received in evidence.)

The Court: Do you have some others that you would like to offer?

Mr. Cunningham: Yes. [58]

The Court: Show them to Mr. Kolisch.

Mr. Cunningham: I show you, Mr. Kolisch, 3-OO, 3-PP, 3-RR, 3-SS, 3-TT, 3-MM, 3-EE, 3-FF, 3-KK, 3-JJ, 3-II—I beg your pardon: I have been using 3 when I should use 6.

This is 6-EE, 6-FF, 6-KK, 6-JJ, 6-II.

The Court: Mr. Kolisch, have you been able to look at them? I think it might be well in the future for you to display those exhibits that you desire to introduce during a recess or during the noon hour and get those all out of the way.

Mr. Kolisch: No objection to 3-OO.

(Discussion off the record.)

The Court: Did you mean 6-OO?

(Testimony of Lewis J. Bronaugh.)

Mr. Cunningham: The exhibit Mr. Kolisch showed me was 3-OO, and there may be a 6-OO.

The Court: 6-OO is a tracing, B109A, the Potter three-temperature refrigerator door details. Is that what you want?

Mr. Cunningham: I believe, your Honor, that is already 3-ZZ. It bears two other markings.

The Court: I think this is a good time to adjourn, and you can give Mr. Kolisch all the others that you propose to use in connection with the testimony of Mr. Bronaugh. Then Mr. Bronaugh's testimony can be completed without any interruptions. [59]

If you desire to use any exhibits in connection with the cross-examination of Mr. Bronaugh, I wish that you would notify either Mr. Cunningham or Mr. Cheatham.

Mr. Ramsey: Yes, your Honor.

The Court: Ladies and gentlemen of the jury, you have heard some testimony now, very little testimony. I want to admonish you again, please do not make up your minds as to how this case should be decided on the testimony of one witness or one witness and a few exhibits. Wait until you have heard all the testimony. I told you yesterday, I believe, that it is the function of the Court to lay down the rules under which the trial will proceed, to pass upon the admissibility of evidence, and to make other rules on questions of law. If I make a mistake as to any ruling, my ruling may be appealed

(Testimony of Lewis J. Bronaugh.)

to a higher court where the error may be corrected, but until my ruling is reversed it is the law of the case, and the litigants as well as their attorneys are bound by my rulings. As to the construction of the law or on a question of admissibility, of course, you are bound by my ruling as well.

In other words, when an exhibit is offered and I sustain an objection interposed by an attorney for the other side, or on my own motion I say, "This testimony is inadmissible," you are not to speculate upon what might have been testified to had the ruling been otherwise and the [60] exhibit admitted or the witness permitted to testify. Throughout the trial I will be called upon to pass upon the admissibility of evidence, and, of course, each time I rule one side prevails, and the other side loses on a particular evidentiary matter. The fact that I do rule does not mean that the party against whom I rule must abide by my decision. He must abide by it in this court, but he preserves his record, and every attorney is permitted to preserve a record, sometimes outside the presence of the jury, so that he may appeal to a higher court if he desires.

When I rule in a certain manner, even though a person has an opportunity to appeal it, he is required to abide by my ruling, and he may not attempt to get in the testimony by any devious means —if an attorney deliberately attempts to get in evidence testimony which is ruled inadmissible, or if any attorney deliberately violates any other ruling

(Testimony of Lewis J. Bronaugh.)

which I make, I think you may infer from such conduct that this attorney is attempting to get an advantage for his client to which the client is not entitled.

I am doing at the end of the first morning session of testimony something I meant to tell you yesterday, and it applies to all of the attorneys in the case, so that you may know when I rule on a question that rule is final unless I reverse it; but no attorney is prevented from making a record but that does not mean that he may attempt to get in evidence [61] which I rule as inadmissible.

Today we are going to take a full two-hour lunch period. We will resume at 2:00 o'clock. Please remember my admonition. Do not talk to anybody about this case. Everyone will remain seated until the jury leaves. You are now excused.

(Thereupon, at 12:00 o'clock noon, the jury retired and the noon recess was taken.) [62]

Afternoon Session

(Court reconvened, pursuant to recess, at 2:00 o'clock p.m., and the following proceedings were had herein:)

The Court: Mr. Bronaugh, you take the stand again.

LEWIS J. BRONAUGH

thereupon resumed the stand as a witness in behalf of the Plaintiff, and testified further as follows:

Mr. Kolisch: Your Honor, I have no objection

(Testimony of Lewis J. Bronaugh.)

to Plaintiff's Exhibits 3-PP, 3-SS, 3-TT, 6-EE, 6-FF, 6-II, 6-JJ, 6-KK, 6-RR, and 6-SS.

The Court: They may be admitted.

(The documents, having been previously marked for identification, were admitted in evidence as follows: Photo Potter converted icebox, as Plaintiff's Exhibit 3-PP; photo Potter refrigerator open, as Plaintiff's Exhibit 3-SS; photo Potter refrigerator closed, as Plaintiff's Exhibit 3-TT; Plaintiff's Exhibit 66 of Stewart-Warner Record at p. 2081—Photo 64945, Potter 3-temperature refrigerator, as Plaintiff's Exhibit 6-EE; Plaintiff's Exhibit 67 of Stewart-Warner [63] Record at p. 2082—Photo 64946, Potter 3-temperature refrigerator, as Plaintiff's Exhibit 6-FF; Plaintiff's Exhibit 70 of Stewart-Warner Record—Photo of Potter Walk-In Milk Cooler, front, as Plaintiff's Exhibit 6-II; Plaintiff's Exhibit 71 of Stewart-Warner Record—Photo of Potter Walk-In Milk Cooler, interior, as Plaintiff's Exhibit 6-JJ; Plaintiff's Exhibit 72 of Stewart-Warner Record—Photo of Potter Walk-In Milk Cooler, side and rear, as Plaintiff's Exhibit 6-KK; Plaintiff's Exhibit 81 of Stewart-Warner Record—Bronaugh's specifications attached to Plaintiff's Exhibit 80, as Plaintiff's Exhibit 6-RR; and Plaintiff's Exhibit 82 of Stewart-Warner Record at p. 2086—Tracing B-108, finned coil for 3-temperature refrigerator, as Plaintiff's Exhibit 6-SS.)

(Testimony of Lewis J. Bronaugh.)

The Court: Now, there—I understand on two of the pictures that are objected to—on one of those pictures there is a date which will be stipulated to and the other picture has no date. I think Mr. Bronaugh knows the date [64] of that picture he should be permitted to state the date, and I suggest that the picture be handed to him.

Mr. Cunningham: I will do so, sir.

The Court: All right. Hand the picture to him.

Mr. Cunningham: May I hand them both to him?

The Court: Just the one, the one that hasn't got the date on it.

Mr. Cunningham: Oh, yes. It's this one here.

(Whereupon, the photograph was handed to the witness.)

The Court: Mr. Bronaugh, do you recall that picture? It is 3-MM.

The Witness: Yes, I do, your Honor.

The Court: All right. Do you recall the date upon which that picture was taken?

The Witness: No, I do not.

The Court: Do you know about the approximate year it was taken?

The Witness: May I study it a moment, please?

The Court: Yes.

(Whereupon, the witness studied the photograph.)

The Witness: I believe it to have been taken in the year 1930.

(Testimony of Lewis J. Bronaugh.)

The Court: What part of the year?

The Witness: The impression is that it would have been [65] very early in the year 1930. I am basing that belief on the size of what, apparently, was the working—the shop working staff of the Potter Refrigerator Corporation, which is very small.

The Court: And so——

The Witness: Less than 12 people. And later in 1930 and in 1931 we had a much larger organization.

The Court: So on the basis of that discussion you believe that it was taken early in the year 1930?

The Witness: I believe so, your Honor.

The Court: All right.

Direct Examination

By Mr. Cunningham:

Q. Now, Mr. Bronaugh—and if I may, your Honor, I think it will facilitate things if I could approach the witness.

The Court: All right.

Q. (By Mr. Cunningham): I hand you the group of exhibits Mr. Kolisch identified in his last statement, and ask you to tell me just very briefly, if you can, what each of them represents.

Mr. Byron: Would you speak a little louder, please?

Q. (By Mr. Cunningham): ——and ask you to tell me briefly, if you can, what each of them represents. Exhibit 6-HH and Exhibit 6-GG.

(Testimony of Lewis J. Bronaugh.)

A. Those are photographs of the Potter three-temperature [66] cabinets that we built here in Portland, Oregon, in 1931, one exhibit being the closed cabinet and the other exhibit the same cabinet with the food compartment and cold storage compartment doors open, showing the interior arrangement.

Q. Exhibit 3-SS and Exhibit 3-TT.

A. One——

Mr. Maguire: Which one? Excuse me, your Honor.

The Witness: One is Exhibit 3-SS and it is a photograph of the exterior of the first metal-covered Potter three-temperature cabinet that we built in 1931.

Exhibit 3-TT is the same cabinet with both compartment doors open showing the arrangement of the food compartment and cold storage compartment.

Q. (By Mr. Cunningham): Were the photographs 6-GG and 6-HH of the same cabinet, one with the door open and the other one closed?

A. Yes.

Q. I show you Exhibits 6-EE and 6-FF, and ask you if you recognize those and if those are not the same cabinet?

A. I believe them to be. Again, they are photographs of the metal-covered three-temperature Potter refrigerators that we built in 1931, one the exterior—6-EE being of the exterior of the cabinet, and 6-FF, the same cabinet with the doors open showing the interior arrangement.

(Testimony of Lewis J. Bronaugh.)

Q. Now, Mr. Bronaugh, if we can get rid of these, I show [67] you Exhibit 6-KK. Can you identify that photograph?

A. Exhibit 6-KK is a portable and demountable dairy cooler plant. It was what is known as a walk-in cooler. That is a structure large enough so that you can walk into it and it was used for storing cans of milk. On the outside is an aerator which is used to cool milk very rapidly to remove the animal temperature and prepare the milk for storage at a temperature somewhere below 50 degrees.

Q. Is Exhibit 6-II which I now show you the same device, different view?

A. It is a different view of the same device with the door partly opened to show a portion of the interior.

Q. And is Exhibit 6-JJ another view of that device?

A. Exhibit 6-JJ is a picture taken from the front of the device with the door open showing the interior space, the coils for cooling the device, and the ice pans in the lower part of the brine tank for the freezing of ice.

Mr. Maguire: Will your Honor permit a very short interruption? The last one, 6-JJ, is a different device, or is it the same device as 6-II and 6-KK?

The Witness: The photograph 6-JJ shows the interior of the walk-in cooler that is shown in Exhibits 6-II and 6-KK.

The Court: The answer to your question, Mr. Maguire, is Yes.

(Testimony of Lewis J. Bronaugh.)

Mr. Maguire: Thank you. [68]

Q. (By Mr. Cunningham): Now, Mr. Bronaugh, can you identify Exhibit 3-TT?

A. Exhibit 3-TT shows the old type of conventional refrigerator that was used in many grocery stores and markets. Originally it was designed to be iced for cooling and having a very large compartment for ice. As shown in this photograph, there has been substituted for the ice an assembly of copper coiling to make a refrigerator coil which performed the same function as the ice in that it removed the heat from the box. It is characteristic of many of the early-type commercial installations that we made of Potter equipment.

Mr. Cunningham: Now, your Honor, I would like to hand this group of photographs to the jury so that they may examine them. Is that all right?

The Court: All right.

(Whereupon, Mr. Cunningham handed the group of photographs to the jury.)

Q. (By Mr. Cunningham): Now, Mr. Bronaugh, I show you Plaintiff's Exhibit 6-SS. Will you tell us briefly what that is?

A. Exhibit 6-FF.

Q. -SS, is it not?

A. -SS—thank you—is a sketch or tracing of the finned coil for the fresh foods compartment of a Potter three-temperature cabinet. It bears date of January 30th, 1931, and [69] from the initials and engineer registry stamp that was prepared by Mr. Charles W. Bale.

(Testimony of Lewis J. Bronaugh.)

Q. Thank you. I show you Plaintiff's Exhibit 6-RR and ask you if you can identify that?

A. Yes, I can, only because by interlineation there are two words written in, "monel metal" being substituted for "stainless steel." It is unquestionably my handwriting and in green ink that I habitually use in my pen.

Q. All right.

A. And it is an instruction sheet for the construction of and equipment of a Potter refrigerator.

Q. Now, Mr. Bronaugh, before the luncheon recess you identified Exhibits 3-UU, 3-VV, 3-WW, 3-YY, 3-ZZ, 3-AAA, -BBB, -CCC, and -DDD. Are those all drawings or blueprints of products of the Potter Refrigerator Corporation?

A. All of those that I looked at and identified this morning were.

Q. Those, I think the record will show, are the ones you identified this morning? A. Yes.

Mr. Cunningham: May I hand these to the jury, please?

(Whereupon, the exhibits mentioned were handed to the jury.) [70]

The Court: I think the parties should stipulate that when an exhibit has been admitted in evidence it need not be shown to the jury immediately but can be shown to the jury at any time, including the arguments to the jury at the conclusion of the case.

Mr. Cunningham: I will be glad to so stipulate, your Honor.

(Testimony of Lewis J. Bronaugh.)

Mr. Ramsey: So stipulated.

Mr. Maguire: May I just complete the understanding that should it be other than an objective or photographic sketch, whether it be in writing or what not, that it would there apply, the same, with regard to those exhibits?

The Court: That is right.

Q. (By Mr. Cunningham): Mr. Bronaugh, you also testified this morning as to some early experimental work or experimental refrigerators which, as I understood you, preceded any of these finished drawings which go back to at least January of 1931. Can you give us a little bit of detail on any of these experimental refrigerators that were prior to 1931, and if you can, will you, please?

A. I believe, Mr. Cunningham, that I discussed this at some length in my testimony this morning. I attempted to describe some of our very early jobs, one in which we took an old icebox and just shoved——

Q. I think you did, sir. Can you give us some idea of [71] what sort of tests you made on these early iceboxes, experimental boxes?

A. We made every conceivable test that one normally in the process of developing an idea would make. That is, we checked temperatures, checked frosting of the coils, we checked the matter of dehydration of fresh foods.

Q. Did you make any actual food preservation tests?

A. We took from the very beginning, as I recall,

(Testimony of Lewis J. Bronaugh.)

because we were aiming at—what we were aiming at was a household refrigerator that would eliminate, insofar as humanly possible, all of the liabilities and drawbacks of the household refrigerator as it then existed and to furnish to the housewife in her kitchen the most usable possible piece of equipment, and we were thinking always in terms of cold in relation to the advancements we had seen occurring in the more modern electric stoves, ranges, in the field of heat. We were trying to eliminate the nuisance and inconvenience of defrosting, to eliminate the dehydration, the drying-out of foodstuffs, outside of the use of so-called hydrator pans, and so on, to keep things covered up so they would not dry out. We wanted to provide in the kitchen means for storing quick-frozen foods which were then coming into the market thanks to my friends, "Spotts" Birds Eye's, developments, and to provide much faster freezing. In those days most women liked to make frozen desserts, and most of them [72] complained that they would not freeze fast enough, and because of the time required the substances would separate and there was a grainy texture to the product. We figured if we could freeze it fast enough we would avoid that undesirable result. We were reaching always towards those things.

Well, from the very beginning in our experimental work we checked to see what progress we were making towards the accomplishment of those goals.

Q. Did you make any actual temperature tests,

(Testimony of Lewis J. Bronaugh.)

and do you have any present recollection of the results of those tests on these experimental boxes?

A. We used in all of our work in temperature testing in the beginning a Taylor Tycos thermometer which was supposed to be a more accurate thermometer to be had on the market. It was a little tubular thermometer, and the first tests were made on the——

Mr. Ramsey: Might I interrupt? A question such as that calls for a Yes or No answer, and each answer is a long speech, and it is difficult to interpose any objection to it. Mr. Bronaugh is a lawyer. It seems that it should call for short questions and short answers and not a rambling statement.

Mr. Maguire: Might I hear that question?

(Last question read.) [73]

Mr. Ramsey: It calls for a Yes or No answer.

The Court: The vice of the question is that there are two questions in one.

Mr. Maguire: We concede that, your Honor, and I think it should be split and then perhaps next asking the witness what did occur.

The Court: Mr. Maguire, I think there is merit in the objection. I wish, Mr. Bronaugh, that you would merely answer the question that is propounded to you. You have to rely on your lawyers and not take it on yourself to make speeches. Just answer the questions.

(Testimony of Lewis J. Bronaugh.)

The Witness: I stand corrected, your Honor. When you have lived as intimately with anything as I did with this——

The Court: I do not want a speech from you now. Just stop that.

Q. (By Mr. Cunningham): What did your tests indicate with respect to temperature in the three different compartments of these experimental boxes, what temperatures, if you recall, for each compartment?

A. I can't recall now, and I cannot answer the question too briefly, because the results were progressive. We first determined that we could accomplish a range of temepratures by a proportionate coiling or refrigerating media in the various segments and sections of the box. [74]

Q. What temperatures were you aiming at in the cooling of the fresh-food compartment?

A. An approximate 40 degrees Fahrenheit.

Q. Did your tests show that you got approximately that? A. Yes.

Q. What was the temperature that you were aiming at in the frozen-foods compartment, approximately? A. Plus 10 degrees Fahrenheit.

Q. Did your tests show that you achieved that result over a substantial period of time?

A. Yes.

Q. Did you have any recording thermometers in this early experimental period?

A. Not at the very beginning. We purchased some very shortly after we got into this work.

(Testimony of Lewis J. Bronaugh.)

Q. What did your tests reveal as to the surface condition of the finned coil in the upper food compartment?

Mr. Ramsey: That is terrifically leading. I object to that.

The Court: I do not think so. You may answer the question.

The Witness: I do not recall whether we actually used a fin coil in the very earliest of the hook-ups we made. We may well have used merely sufficient copper coil, which was generally done in refrigeration work in those days, to [75] provide a sufficient radiating surface.

Q. Well, sir, you did ultimately—or not ultimately—very shortly did you use a fin coil?

The Court: Do not answer that question.

Mr. Maguire: If your Honor will permit us just a moment?

The Court: Yes.

(Discussion off the record.)

Q. (By Mr. Cunningham): When, if at all, did you discuss using a fin coil?

The Court: Are you withdrawing the question, Mr. Maguire?

Mr. Maguire: Yes, your Honor.

The Court: Go ahead.

The Witness: Very early in——

The Court: He has not asked you a question yet. Go ahead.

(Testimony of Lewis J. Bronaugh.)

Mr. Cunningham: May we have it read, your Honor?

(Last question read.)

Q. (By Mr. Cunningham): When, if at all, did you start using a fin coil?

A. Very early in our experimental work.

Q. About when was that in years?

A. As near as I can place it in memory, it was early in the year 1930.

Q. Did you at one time earlier employ a so-called cold wall [76] in the cooling compartment?

A. I discussed that this morning, and I believe stated that we did try out that idea and early discarded it.

Q. Was that the first of the ideas you tried out?

A. I do not believe so. I believe we first started using a coil and a separated box.

Q. Was that prior to any use of a fin coil, as you recall it? A. I believe so.

Q. Can you give us a year for that earliest type of use?

The Court: Of what?

Mr. Cunningham: The plain coil first.

The Court: When did you first start to use a plain coil?

The Witness: I think very early in 1930.

Q. (By Mr. Cunningham): Is the same true of the cold wall structure? A. Yes.

Q. That you described?

(Testimony of Lewis J. Bronaugh.)

A. Yes, they were being used at the same time.

Q. Over how long a period of time did all the work on these three-temperature experimental cabinets cover?

The Court: I think it would be easier, Mr. Cunningham, if you would ask him when the work commenced, and then your next question is when did it end. [77]

Mr. Cunningham: I will ask you those questions. When did the work commence?

A. As best I can recall, in the winter of 1929-30.

Mr. Byron: May it please the Court, I think we may avoid confusion in thought here. This litigation seems to be over two-temperature boxes or refrigerators, and there is a great deal being said about three-temperature refrigerators, and I understand what they are talking about, but I am afraid there are some here that do not, including the jury. Is this temperature all pertinent to two-temperature boxes, or is it associated with something foreign to this?

The Court: I would like to find that out myself. How about that, Mr Cunningham?

Mr. Cunningham: May I ask the witness whether he distinguishes in his testimony between three-temperature and two-temperature boxes?

The Witness: I do not. I have used the expression, three-temperature box; that was what we called the Potter refrigerator.

The Court: What are three temperatures?

The Witness: We had one-temperature in the

(Testimony of Lewis J. Bronaugh.)

fresh-foods compartment; we had one-temperature in the cold storage compartment, and we had a third temperature in the freezer compartment which I had stated to be approximately plus 40 degrees Fahrenheit in the food compartment, plus 10 degrees Fahrenheit [78] in the cold storage compartment, and minus 10 degrees Fahrenheit in the freezer compartment.

The Court: Was that shown on the original patent application?

The Witness: I cannot answer the question, your Honor.

The Court: Are you not one of the patentees?

The Witness: I did not draw the application, and I had not anything to do with the drafting of the patent claims.

The Court: Did you receive a patent on the three-temperature——

The Witness: We did.

The Court: You did?

The Witness: We did.

Mr. Cunningham: This might help, your Honor, if you can all see it. I will put my hand in this upper compartment. What was the temperature in it?

A. That is the fresh-foods compartment.

Mr. Maguire: Wait a minute. Let us get the question he asked. What was the temperature, he asked.

Q. (By Mr. Cunningham): What was the temperature of this?

(Testimony of Lewis J. Bronaugh.)

A. The temperature, the temperature we aimed at and set the machine to operate was an approximate 40 degrees Fahrenheit.

Q. Now, I put my hand in the lower compartment to the left. At what temperature did you aim at for that compartment? [79]

A. That was the cold storage compartment, and we aimed at a temperature of plus 10 degrees Fahrenheit.

Q. I put my hand in this little receptacle, apparently for ice cube trays, right in the lower compartment. What was the temperature you aimed at there?

A. That was the freezer compartment, and we aimed at a temperature of minus 10 degrees Fahrenheit.

Q. So, if I may summarize, there are three temperatures but really two main compartments. Does that explain why we sometimes refer to that as two-temperature or two-compartment or three-temperature and three-compartment boxes?

A. I think so. I said we have referred to the Potter as a three-temperature cabinet.

Q. I have been referring to Exhibit 11-B.

Mr. Ramsey: If the Court please, do I understand that the reissue patent and the claims thereof and the claims that he says he secured covered the —covered a three-temperature box?

Mr. Cunningham: I object to that question, your Honor. He is not on as a patent expert—are you asking me?

(Testimony of Lewis J. Bronaugh.)

Mr. Ramsey: Yes.

Mr. Maguire: He is asking you.

Mr. Cunningham: May I have the question?

(Last question read.) [80]

Mr. Cunningham: Yes; as I understand that term, yes.

Mr. Ramsey: Very well.

Q. (By Mr. Cunningham): Did you achieve these results? A. Yes, we did.

Q. By what month in the year 1930 had you achieved these results?

Mr. Ramsey: That is a conclusion. It is meaningless to us. What results are you speaking of?

Mr. Cunningham: I am trying to fix the time, your Honor.

Mr. Maguire: I think, your Honor, he spoke about an approximate 40 degrees in the fresh foods and an approximate 10 degrees above zero Fahrenheit on the frozen food, and an approximate 10 degrees below zero Fahrenheit on the freezing compartment.

Mr. Ramsey: Is that the meaning of counsel's question now?

Mr. Cunningham: That is it, that and the other objectives that he has testified about such as Moist Cold—I limit it to the three-temperatures now, and I will, instead of limiting you to 1930, I will say 1929-30.

The Court: You tell him when it was completed.

Mr. Cunningham: Will you answer the Judge's question?

(Testimony of Lewis J. Bronaugh.)

The Court: No, you restate your question.

Q. (By Mr. Cunningham): What, Mr. Bronaugh, is the most [81] precise time that you now recall when you and the others working with you were satisfied that you had achieved the results that you were seeking in a three-temperature household refrigerator?

Mr. Ramsey: Objected to. That is the same question. What results are obtained; are you speaking now of just when did he get a three-temperature box, or what is your question?

The Court: Are you referring, Mr. Cunningham, to the construction of a box?

Mr. Cunningham: Yes, your Honor.

The Court: All right. Do you know his question, Mr. Bronaugh?

The Witness: It is a very difficult question for me to answer, your Honor. When you are developing ideas, it is very hard to say when you have accomplished what you are seeking to develop and accomplish because it is a progressive matter.

Q. (By Mr. Cunningham): I realize that, Mr. Bronaugh. I am simply trying to get you to state a time by which you felt, had the sense, that you had accomplished your objectives.

A. As best I can answer that—I will do the best I can with it—from the early tests that we made——

The Court: He is just asking you for a date, Mr. Bronaugh. He is just asking you for a date.

The Witness: The best answer I could give to

(Testimony of Lewis J. Bronaugh.)

that would [82] be, in my recollection, sometime during the winter of 1929-30.

Mr. Cunningham: May I have Plaintiff's Exhibit 17?

(Document presented.)

Q. Mr. Bronaugh, I show you the Plaintiff's Exhibit 17, which is a certified copy of the title documents, and direct your attention to the first page below the certificate and to the signature on that page. Whose signature is that?

A. That is mine.

Q. Did you sign that assignment?

A. I did.

Q. Have you any interest in the patent in suit?

A. None whatever.

Q. Any interest in the plaintiff corporation?

A. None whatever.

Q. Did your interest in the patent cease with that assignment? A. Yes.

Q. Proprietary interest, I mean. A. Yes.

The Court: What was the date of the assignment?

The Witness: 1932.

Mr. Cunningham: It was 1932, I think.

The Witness: December 27, 1932.

Mr. Cunningham: That is all, your Honor.

Mr. Ramsey: I am going to make a motion to strike from [83] Mr. Bronaugh's testimony that concerning, first, the preservation of frozen foods.

The Court: Go ahead.

(Testimony of Lewis J. Bronaugh.)

Mr. Ramsey: And the second one having to do with the refrigeration art prior to September 1, 1928, when he entered it.

The Court: What was that testimony? You mean on the state of the art prior to——

Mr. Ramsey: No, there was some testimony as to how the refrigeration practical art stood and the developments of it prior to some time, but his first testimony was that he knew nothing of it until September 1, 1928. [84]

The Court: And you are asking that all of his testimony concerning the state of the art prior to 1928 be stricken?

Mr. Ramsey: September 1, 1928; yes.

The Court: Well, I don't recall the testimony that he gave concerning that. What about that, Mr. Cunningham?

Mr. Cunningham: Your Honor, I must say I am not sure what the motion is and I might say I do not recall any precise testimony prior to that. I think Mr. Bronaugh testified only as to his own knowledge and if he had knowledge of conventional refrigerators prior to 1928 even though he wasn't in the business he should be allowed to testify about the knowledge. I should think the motion ought to be denied.

The Witness: May I be heard, your Honor?

The Court: No. You are a witness, Mr. Bronaugh, and I think you ought to understand that.

The Witness: I merely wanted to help.

The Court: Any time you want to argue the case you can go down and sit at the counsel table.

(Testimony of Lewis J. Bronaugh.)

Mr. Cunningham, a few minutes ago, you, in answer to Mr. Ramsey's question when he propounded a question to him, you objected to the question on the ground that Mr. Bronaugh was not an expert as to a patent and his testimony is not admissible concerning the reach of the claim and therefore that is what I understood and I think you are correct.

Mr. Cunnigham: Well, sir, I hope this isn't addressed [85] as to the patent. This is as to his knowledge as to the conventional refrigerator, the devices, not the words of the patent claim. That was his other question. He is not an expert in the words the patent—I never—I expressly said many times he was a fact expert, not an expert in verbalism.

The Court: Yes. Mr. Ramsey, I don't think that this motion has been made timely and the jury understands that Mr. Bronaugh is not an expert, and therefore I am going to deny your motion with that explanation.

Mr. Ramsey: Very well.

Cross-Examination

By Mr. Ramsey:

Q. You spoke of the early development work after you were President of the Potter Refrigeration Company. There was some testimony by Mr. Potter and he identified certain of these boxes by name and customer name. I wonder whether you have the same recollection. How many experimental boxes were there made, two-compartment?

(Testimony of Lewis J. Bronaugh.)

Mr. Cunningham: Objection.

The Court: The objection is sustained. If you want to ask him if he knows whether they had names and how many there were, that's all right, but don't compare it to Mr. Potter's testimony at this time.

Mr. Ramsey: Very well.

Q. (By Mr. Ramsey): How many experimental boxes were made before any were sold?

A. I do not recall. A good many. [86]

Q. How many would you say?

A. If I may enlarge the descriptive word "box" to include the very crude assemblies that we made up in the first stages of our experimental work, I would say five.

Q. And those were boxes made of Fir-Tex?

A. One of the first boxes we made or used in our work was an old icebox that I testified this morning that we simply inserted a vertical slab of Fir-Tex to separate the two sides of the box to give us our separated—thermally separated compartments.

Q. Is that the first two-compartment box made?

A. I believe it was.

Q. And what time was that?

A. As near as I can recall it was in the winter of '29-'30.

Q. Thereafter was another box made having a compartment dividing it into two—a partition dividing it into two compartments?

A. That one was divided into two compartments.

(Testimony of Lewis J. Bronaugh.)

Q. Was there another one after that?

A. Several more after that.

Q. And I think it might be four or five——

A. Yes.

Q. ——additional ones. Then what was the first box made which was self-contained; that is, has the motor in it?

A. Your question is, "What was that box?" Do you want me [87] to describe it?

Q. No. Identify it, if you can.

A. The only way I can identify it is by description. There is nothing to show it.

Q. Can you identify it by customer name?

A. No, sir; I cannot.

Q. Those boxes were not identified in the factory by customer name? A. No, sir.

Q. You were in the factory? A. Yes, sir.

Q. Where was Mr. Potter?

A. At what time?

Q. When these boxes were made.

A. These boxes were made over a period of some two years.

Q. And the one we are talking about now is the first self-contained box. When was that made?

A. Mr. Potter was in Seattle most of the time and, of course, coming down to Portland quite frequently. Your second question, "When was that made?"—as best I can recall it was made in the fall of 1930.

Q. Yes. And do you know to whom that was sold?

(Testimony of Lewis J. Bronaugh.)

A. I don't know whether it was ever sold. It was still there when I left the organization late in 1931.

Q. Do you know of a sale to a man by the name of McChesney? [88] A. I do not.

Q. You never heard of that?

A. I have heard of it; I do not know of it.

Q. Was that during your time?

A. I have no recollection or memory or personal knowledge of the sale of a box to a Mr. McChesney.

Q. And you heard no conversation around the factory about the so-called McChesney box?

A. I do not believe so.

Q. Do you know of the Barry box? B-a-r-r-y?

A. I know it very well.

Q. And why was it called the Barry box?

A. Because I sold it to Jack Barry.

Q. And who was Jack Barry?

A. He is an insurance man here in the City of Portland.

Q. Still is? A. So far as I know.

Q. And when was that built?

A. As near as I can recall it was built in the summer of 1930.

Q. And when was it sold to Mr. Barry?

A. I do not know. I do not recall.

Q. You sold it yourself?

A. I sold it myself.

Q. Was that a self-contained box?

A. No, it was not. It was an unpainted wooden box that I had [89] made for experimental pur-

(Testimony of Lewis J. Bronaugh.)

poses. The compressor was separate from the box.

Q. And we understand the word "self-contained" as we are discussing this matter as meaning the mechanism within the cabinet?

A. The compressor mechanism within the cabinet.

Q. That is correct. Can you tell us the construction of the cooling coil in the Barry box?

A. It was a finned coil, aluminum fins, through which extended copper tubing.

Q. Were those purchased?

A. I do not recall. The first of those coils we made up. We were using Larkin coils in commercial work and the first of the finned coils that I adapted to our experimental work were remodeled out of larger Larkin coils. We later, as I recall, purchased a coil of a size suitable for our purpose.

Q. Then your testimony is that you did not use Larkin coils?

Mr. Byron: No.

Mr. Cunningham: I object.

The Witness: I didn't say that. I said the first coils we used were modified Larkin coils. We cut them up and reassembled them to a size suitable for our purpose.

Q. (By Mr. Ramsey): And how did you cut them up, take them to pieces?

A. We sawed the fins in two, the first one. They were a [90] double row, copper. The fins were per-
haps [illegible] wide (witness demonstrates size). We sawed

(Testimony of Lewis J. Bronaugh.)

them right down through the middle so as to make two coils out of one and then we shortened them up. We took the returns off of the tubing or perhaps cut off the other end, I don't recall, and shortened them up to provide a coil of the size and radiating area we wanted.

Q. In other words, you bought too large a coil and made it narrower?

A. We took coils out of stock, coils that we had for commercial refrigeration purposes.

Q. And made them smaller?

A. That's right.

Q. And were those coils that you purchased on the open market?

A. They were purchased from the Larkin factory which, as I recall, was located down in Georgia.

Q. But they were standard coils?

A. That's right.

Q. And purchased on the open market?

A. That's right.

Q. And widely used?

A. I beg your pardon?

Q. Widely used?

A. I don't know how widely used.

Q. You used them? [91]

A. We used them.

Q. And you say you took them out of stock; you had probably quite a few? A. We did.

Q. And had used it for quite a long time?

A. Yes.

Q. You understood their characteristics?

(Testimony of Lewis J. Bronaugh.)

A. Yes.

Q. And then, in this particular installation you cut them up in some manner to make them smaller?

A. That's right.

Q. Did it change their function? A. No.

Q. They operated in the same way that they always did except they were smaller? A. Yes.

Q. They were made to fit a compartment?

A. Substantially so. They were made for commercial usage.

Q. Well, let's go back again When you rebuilt them or reconstructed them, you reconstructed them to fit a certain compartment, did you not?

A. We did.

Q. And when you did reconstruct them they functioned exactly the way they did before except that they were smaller, is that correct? [92]

A. That's correct.

Q. Thank you. Would you recognize a Larkin coil now if you saw it or saw a picture of it?

A. I think I would recognize one if it was the same type and design that I was familiar with 25 years ago.

Mr. Ramsey: May we move the easel over so the witness may see it?

(Whereupon, the bailiff moved the easel to the betterment of the jury's view.)

Q. (By Mr. Ramsey): Would you mind stepping over here, Mr. Bronaugh, and looking at the Defendants' Exhibit 114-K at the upper edge of it,

(Testimony of Lewis J. Bronaugh.)

which is marked L. U. Larkin, refrigerant method and apparatus, September 16, 1930, No. 1,776,235. Is that a Larkin coil?

A. Which device are you referring to?

Q. It's marked Figure 3.

A. I never saw a Larkin coil that had the slightest resemblance to that illustration.

Q. How does it differ?

A. None of this mechanism was in there, or device, whatever you want to term it. It was simply copper—or aluminum plates through which extended copper tubing in assembly dependent upon the size and capacity of the coil, and there was no such device as this.

Q. Now, when you are marking "this" that is unintelligible [93] on the record. Something marked with a reference character "4"?

A. 4.

Q. Is that the only point of difference?

A. It has—it bears no resemblance to any Larkin coil that I ever saw.

Q. Well, does it have——

A. Except that it apparently has fins.

Q. Does it have coils?

A. It appears to have copper tubing extending through what appear to be the fins.

Q. Can you tell whether that is copper or aluminum? A. No.

Q. It has coils?

A. I don't know just what you mean by the word "coils."

(Testimony of Lewis J. Bronaugh.)

Q. You can——

A. It appears to me that the copper tubing merely extends through. A coil, in my thinking, means something that returns.

Q. Does it have pipe? A. Yes, apparently.

Q. Does it have fins on the pipe?

A. Apparently.

Q. You can't tell that by looking at it?

A. I can't tell whether those are fins. They are drawn unquestionably to simulate fins. There is no end section from [94] which I can tell.

Q. But is that what a fin would look like if it were?

A. If you were looking at the edge of the fins, yes.

Mr. Maguire: It's not quite clear to me. Are you speaking about the drawing or do you have another drawing?

Mr. Ramsey: Mr. Maguire, this witness is looking at a drawing and it's been identified to him, he has a pointer in his hand, and he is pointing with that pointer to certain elements on it, and I don't know why it isn't clear to you and——

Mr. Maguire: Well, I thought he said that he could not tell it was a fin unless he had a longitudinal section instead of a flat section.

Mr. Ramsey: Oh! Pardon me.

Mr. Maguire: That's the only thing I was interested in.

Q. (By Mr. Ramsey): What sort of a section does it have?

(Testimony of Lewis J. Bronaugh.)

A. It doesn't have any. It merely has black lines with no shadings to indicate any depth or width.

Q. Yes. But you think it is a finned coil?

A. Oh, I think it is drawn to simulate a finned coil.

Q. Would it—would you call it a finned coil?

The Court: I think that is enough on that point. Just go on to your next point.

Q. (By Mr. Ramsey): May I read to you from under that drawing? It may help to identify it more. This is from the same exhibit [95] and it's identified page 2, line 113 to page 3, line 18:

"With the present type coil properly arranged in the casing, a temperature of 36 degrees Fahrenheit can be maintained in the casing without frosting the plates at all, and consequently without freezing or dehydrating any of the contents of the casing whatever. The very large surface area and rapid heat absorption of the aluminum plate all lead to a rapid temperature drop when the unit is in operation. Since this temperature drop is less than 2 degrees, it follows that each refrigerating cycle of operation must be of very short duration, and consequently must greatly reduce the amount of power required to maintain it in operation.

"Whatever little moisture may be picked up from the air in the casing is deposited on the plates; and because of the large surface area of these plates, must, when condensed, be spread on such plates in a very thin film which is constantly being removed by the circulating air and returned to the air and meats from where it is taken.

(Testimony of Lewis J. Bronaugh.)

"Where below-freezing temperature must be maintained on the blades as in the prior coolers it is obvious that any moisture taken from the meats becomes condensed and frozen on the plates, [96] and cannot be removed therefrom by the circulating air. In this case the meats"

and not only those—pardon me——

"In this case the meats not only lose weight which cannot be recovered but also deteriorate greatly in quality.

"The maintenance of humidity is only one of the most important results flowing from the use of cooling coils designed as disclosed herein."

Does that explain anything to you, Mr. Bronaugh?

Mr. Cunningham: Objection.

The Court: What were you reading to him, the patent application?

Mr. Ramsey: No. I am reading from the description under this because he says he doesn't know whether it's coils or fins.

Mr. Cunningham: Your Honor, the answer to your question is he is reading from the patent, another patent. There is a patchwork of patents on that board that he is reading from.

Mr. Ramsey: That is correct. This is part of the description.

Mr. Cunningham: In a patent that we had nothing to do with.

The Court: Do you understand what he read?

The Witness: Yes, sir. [97]

(Testimony of Lewis J. Bronaugh.)

The Court: Does that help you out any?

The Witness: I have tried to answer Mr. Ramsey's questions as positively and as clearly as I can talking about what is shown on this drawing. Now, if we are talking about what, in my opinion, that drawing simulates I can talk differently, but when I am limited to that drawing I can only describe what I see in that drawing.

The Court: It is 3:00 o'clock now. We are going to take a short recess and we will continue afterwards.

(Whereupon, the jury was excused for the afternoon recess.)

The Court: I don't think that it is proper to read a prolonged description like that, Mr. Ramsey. You are just wasting time. I don't understand your cross-examination. The man has admitted three times that it's a fin. Now why don't you leave him alone and go to something important instead of reading for half an hour and putting everybody to sleep?

Now take a ten-minute recess.

(Recess.) [98]

Q. (By Mr. Ramsey): Mr. Bronaugh, you signed a reapplication for the original patent, as I understand it, on January 30, 1931; is that correct?

A. I have no recollection of the date, Mr. Ramsey.

Q. You just testified——

(Testimony of Lewis J. Bronaugh.)

A. I signed the original application, I assume. I have no recollection of it. If my signature appears and it is dated, that must be it.

Q. That was sort of a formal question. You just testified to the date, and I just was refreshing your mind.

At that time was a search made through the patent records?

A. I do not know. I had nothing whatever to do with that. Mr. Potter handled that end of things through Mr. Birkenbeuel, a patent attorney here in Portland.

Q. You did not discuss the matter with the patent attorney?

A. I don't recall whether I did or not. I had very little contact with Mr. Birkenbeuel.

Q. Do you know when a patent [illegible]mination—a search was made?

A. I believe a search was made in 1931 because they sent out to me quite a number of file wrappers to examine.

Q. What part of the year was that?

A. I think it was during the summer of 1931, as best I can recall. [99]

Q. These file wrappers covered what?

A. Various patents in the field of refrigeration.

The Court: You do not mean file wrappers, do you, Mr Bronaugh; you mean the patent?

The Witness: They were referred to as file wrappers. That term is a meaningless term. That is the way they were described to me, and that is why I used the term.

(Testimony of Lewis J. Bronaugh.)

Q. (By Mr. Ramsey): You remember what you looked at, and were they a complete file of everything that had occurred in the patent office with regard to these particular patents?

A. I don't know whether they were everything that would refer to it or not. As I recall, there was a good deal of—many pages of them with drawings and descriptions; some of them were drawings and descriptions of apparatus.

Q. They were not just paper copies of patents; they were complete files?

A. As I recall, they were.

Q. How many of them were there, how many patents? A. I have no idea.

Q. Would you say one, two, twelve, fifteen?

A. There was more than one. There might have been twelve. I have no way of remembering at all.

Q. What were they supposed to cover?

A. My understanding was that they were supposed to cover ideas in the field of refrigeration that related in some way [100] or degree to other ideas.

Q. They were the result of a search made?

A. Yes, I understood so.

Q. They were referred to you for your consideration? A. That is right.

Q. You looked them over?

A. That is right.

Q. Was one of them—you think that was in the summertime of 1931?

A. As best I can recall.

(Testimony of Lewis J. Bronaugh.)

Q. Your application for a patent was filed in January of that year?

A. If that is the date it bears.

Q. I mean, how long did it follow the filing of your application? A. I don't know.

Q. Well, if the application shows on its face it was filed in February of 1931, would that then correspond with your memory that you received these in the summertime of that year?

A. That is merely recollection. There is nothing to which I can relate it, and I do not know how accurate I am. It might have been 1930. I don't know. I think it was 1931. I don't know.

Q. Could you remember if it was several [101] months? A. No. I can't remember.

Q. I have forgotten: did I ask you was the Anderson Patent one of these that was sent to you?

A. As I recall, it was.

Q. By Anderson I mean Patent No. 1,439,051.

A. The number is meaningless. By Anderson I simply identify and referred to a patent which Mr. Potter purchased.

Q. Is that the drawing you started to look at; does that call it back to your mind?

A. I think that is it.

Q. That is Exhibit 16-B?

A. I think that is it.

Q. You had a file wrapper on that in the summer, you believe, of 1931?

A. As I recall, I believe we did.

Q. Did you discuss that with Mr. Birkenhead,

(Testimony of Lewis J. Bronaugh.)

your attorney? A. I don't recall that.

Q. Did you discuss it with Mr. Potter?

A. Not if it was in 1931, because Mr. Potter was then, I believe, in Buffalo, New York.

Q. Did you write to him about it?

A. I assume that I probably did. I don't remember specifically.

Q. Did Mr. Potter see those file wrappers?

A. I wouldn't know. [102]

Q. Did Mr. Potter see those file wrappers?

A. I wouldn't know.

Q. Were they sent to him?

A. I wouldn't know.

Q. Do you know whether Mr. Potter purchased that Anderson Patent?

A. By hearsay I was told he did.

Q. Did you see refrigerators manufactured with a patent number, with that patent number on them?

A. No.

Q. Have you looked at them in the courtroom?

A. I think so, yes; I think there is one here.

Q. Of course, it has been a long time, and it is rather hard for you to remember some of these things.

A. It is hard for me to remember things that I did not do and live with.

Q. But you made these refrigerators?

A. I made refrigerators, yes. I know what I did.

Q. No. I mean at a factory of which you were the president.

(Testimony of Lewis J. Bronaugh.)

A. I know what I built. I know what I did. I do not know what somebody else did.

Q. Who was the person that made these?

A. Which?

Q. Refrigerators.

A. Which refrigerators? [103]

Q. The ones that carry those numbers, the number of the Anderson Patent. Not you?

A. I don't know.

Q. Well, I will ask you specifically, did Potter make the refrigerator which is marked No. 116? Was that made in the factory of which you were president? Would you care to look at it?

(Witness leaves witness stand and examines refrigerator.)

A. Is that the box?

Q. That is this one here (indicating).

A. I know nothing whatever of that box. That was not made by the Potter Refrigerator Corporation of Portland, Oregon.

Q. This next one is Plaintiff's 11-A.

A. That is right; we built the box here in Portland, Oregon, in our plant.

Q. Fine; thank you.

The Court: Did you say you did build it?

The Witness: The center box, your Honor.

Mr. Maguire: The one last referred to.

The Court: Go ahead.

Q. (By Mr. Ramsey): What did you do with the file wrappers that were sent to you?

(Testimony of Lewis J. Bronaugh.)

A. I don't recall.

Q. Going back now to the time in the factory in which you [104] were doing experimental work and you were making some comparative tests, what were you testing with? I mean what other refrigerator compartments were you testing with, if any?

A. I don't know that I understand your question.

Q. Pehaps I can recall—was there a case in there, a display case, two-compartments display case?

A. We had a display case. We had various display cases on display down in our sales room.

Q. Do you remember one called Supercold?

Mr. Cunningham: If your Honor please, I object. I think we ought to keep on the subject of household refrigeration and not storage and display cases, another part of the business.

The Court: I thought in his direct examination he talked about other types of cases.

Mr. Cunningham: Not a word that I recall, your Honor.

Mr. Ramsey: Coolers, walk-in coolers.

Mr. Cunningham: That is a different thing, walk-in coolers, not display cases for storage.

The Court: Objection overruled. This is cross-examination.

Q. (By Mr. Ramsey): Do you remember this Supercold case, a special one?

The Witness: No. We sold some Supercold cases,

(Testimony of Lewis J. Bronaugh.)

as I [105] recall, but I haven't any recollection of any specific one.

Q. Did you have a Supercold case there with two different temperatures in it and two separate compartments? A. Not that I recall.

Q. Did you make examinations of that at the same time that you were working with a Fir-Tex box? A. Not that I recall.

Q. Did you make examinations of the Supercold display case and the Fir-Tex box on humidities?

Mr. Maguire: Do you mean tests or examinations?

Mr. Ramsey: Comparative tests.

Mr. Maguire: That is all right, then.

The Witness: I have no recollection of using a Supercold case in any comparative tests with what I was doing in the household refrigeration cabinet.

Q. Do you remember Mr. Elmer Steele who worked there? A. Yes, I do.

Q. Do you remember your taking him upstairs and showing him what work you were doing?

A. No, I do not. I probably took a good many people up there. There was no reason why I would remember it.

Q. Do you remember buying meat at Swift & Company? A. Yes.

Q. Do you remember putting part of it in your cabinet and part of it in this particular Supercold case? [106] A. No.

Q. Do you remember measuring the results of

(Testimony of Lewis J. Bronaugh.)

that particular Supercold case against the results of this Fir-Tex box?

A. I have said that I recall no comparative tests between the two.

Q. Very well.

Now, just the subject of that mechanism that you described in connection with the drawings of the original application or of the reissue patent in question, you were mentioning terms to the jury. One of them is an expansion coil, and you were explaining it in somewhat detailed form.

A. Expansion coil or valve?

Q. Expansion valve. I am sorry; you are correct, expansion valve, and this tube that you were talking about with a very small opening in it, is that a capillary tube that is the equivalent of the expansion valve?

A. I do not know exactly what you mean by a capillary tube.

Q. I thought you used the word, and you said there was some tube with an opening ten-thousandths of an inch in it?

A. No, I did not say that with reference to a capillary tube. I merely used that dimension to illustrate the reduction of pressure from a larger tube to the atmosphere, I think, or to a larger tube merely a restriction device.

Q. Where does that restriction exist?

A. Between the high and low side of the refrigeration [107] cycle.

Q. In what sort of a device?

(Testimony of Lewis J. Bronaugh.)

A. It can be anything.

Q. Could it be an expansion valve?

A. It could be an expansion valve.

Q. Could it be a capillary tube?

A. What do you mean by capillary tube?

Q. Let it go. No further cross-examination.

Redirect Examination

By Mr. Cunningham:

Q. Mr. Bronaugh, I offer in evidence and show you Plaintiff's Exhibit 6-KKKK (presenting document to opposing counsel).

Mr. Ramsey: No objection.

(Thereupon the document, sketch of a finned coil in the Potter refrigerator, previously marked Plaintiff's Exhibit 6-KKKK, was received in evidence.)

Q. (By Mr. Cunningham): Can you tell the jury what the document is?

A. It is a very crude sketch that I made to illustrate the finned coil that was used in the Potter refrigerator in question.

Mr. Cunningham: May the jury look at the sketch, your [108] Honor?

The Court: Yes.

(Document presented to the jury.)

The Court: When did you sever all your connection with Potter and Potter Refrigerator Corporation?

(Testimony of Lewis J. Bronaugh.)

The Witness: I believe it was December of 1931, your Honor.

The Court: In other words, you filed your application for a patent in February, 1931. It was issued in October, 1936, but in December of that same year, that is, of 1931, you severed all connection and transferred all your rights to Potter?

The Witness: I had no rights, your Honor, in the patent.

The Court: You never did have an interest in the patent?

The Witness: No. I was employed by the Potter Refrigeration Corporation on a salary basis.

The Court: Therefore, your name which appears on the reissued patent that was issued in 1948, you had no interest in it?

A. Because I was on the original, but I had no interest in it.

Q. (By Mr. Cunningham): Mr. Bronaugh, as I understood your testimony on cross-examination, you referred to an Anderson [109] Patent and an Anderson refrigerator, did you not?

A. Yes, I was questioned about it.

Q. Did you see anything in this room that caused you to say that was an Anderson refrigerator?

A. The first box closest to the jury box I would say—I had never seen it before or one like it before, but from its resemblance to the design shown or the sketches shown in the Anderson Patent, as I recall them, I would say that was it.

Q. That is the design and the sketches that you

(Testimony of Lewis J. Bronaugh.)

saw in this file wrapper of that particular Anderson Patent. Is your mind refreshed now as to Plaintiff's Exhibit 16-B standing on the easel there?

The Court: Mr. Cunningham, I want to remind you of what I did this morning. Are you going to ask him about that after I told you that that is inadmissible and he was not qualified to do it?

Mr. Cunningham: Your Honor, it is our position that it was opened up on cross-examination and that now the situation is changed, and I have a short line of questions about that particular Anderson box that is described in the Anderson Patent. May I put on the record that it is Defendants' Exhibit 115, the physical exhibit. I would like a ruling, your Honor, if I may.

Mr. Maguire: On that matter, your Honor, I say that [110] I fully appreciate the attitude your Honor is taking, and I want to say that, so far as myself and my colleague are concerned, we intend rigidly to——

The Court: Make your argument. What do you have in mind?

Mr. Maguire: Counsel on cross-examination after your Honor's ruling asked him whether he had examined the file wrapper in that case—in that patent, rather, and whether or not a particular box was a box which was the exemplification or construction of the Anderson Patent. [111]

Mr. Maguire: He never said that. He just said while he was President of the Potter Refrigerator Company whether a box manufactured by Potter

(Testimony of Lewis J. Bronaugh.)

had an Anderson number on it. Well, it couldn't have an Anderson number on it unless they're engaged in fraud.

The Court: Well, the Potter Company, I think the testimony showed and he testified, Potter purchased the Anderson patent.

Mr. Maguire: Quite so. Quite so.

The Court: I don't understand.

Mr. Maguire: All right. Now, your Honor——

The Court: Go ahead.

Mr. Maguire: ——either that was cross-examination which was subject to objection, or a cross-examination which your Honor of your own motion would have held—I don't say would have held; I should have said could have held as proper cross-examination, but if in the face of the Court's ruling counsel on cross-examination opened the door about a particular matter other than what this man knows about the matter—for instance, "Did you have a file wrapper in regard to that? Did you examine the file wrapper? Did you make a box or your company make a box?

Mr. Ramsey: I am sorry, Bob. You are mistaken and I know honestly so. We didn't refer to the Anderson box. We referred to two Potter boxes. See, these two—I know you're [112] honestly mistaken. These two are the Potter boxes and we never touched the Anderson box.

The Court: I am just going to rule right now that he can talk about the Anderson patent but he

(Testimony of Lewis J. Bronaugh.)

can't explain the Anderson patent because by Mr. Cunningham's own statement he is not qualified to do it.

Mr. Cunningham: I don't want him to do that, sir. I want him to talk about boxes made under the Anderson patent.

The Court: Do you know of any boxes that were made under the Anderson patent?

The Witness: No, your Honor, I didn't build any boxes under the Anderson patent, to my knowledge.

Mr. Maguire: I was under a misapprehension, your Honor, and I beg your Honor's pardon.

Mr. Cunningham: Well, your Honor, I was under a misapprehension, too. I thought he did say that he had recognized that Exhibit 115.

The Court: And you asked him when he came into court today if he saw an Anderson box.

Mr. Cunningham: Well, that's all, your Honor.

The Court: All right. That's all, Mr. Bronaugh.

(Witness excused.)

Mr. Cunningham: Thank you very much.

Now, if your Honor please, we have perhaps just [113] about enough time for the Bade deposition.

The Court: Bade deposition?

Mr. Cunningham: Yes.

The Court: Where does Mr. Bade live?

Mr. Cunningham: Well, sir, he is in California.

The Court: Oh, is that the deposition that was taken here?

Mr. Cunningham: It was taken in your Honor's presence.

The Court: Yes. I know that deposition.

Ladies and gentlemen of the jury, Mr. Bade is a witness on behalf of the plaintiff. He was in California and he came up to Portland a few days ago and there he gave a deposition in my office and he was interrogated by Mr. Cunningham and he was cross-examined by Mr. Ramsey under courtroom conditions. Now, this is the first of a number of depositions that will be read in this case. One or more of the depositions will be of people who are now deceased. Other depositions will be read of people who, for one reason or another, were unable to come to this court to testify in person. But the testimony of each of them was taken under the same conditions as witnesses testifying in court. In other words, they were sworn to tell the truth, they were examined by the person who desired their testimony to be taken, they were cross-examined by attorneys for the opposite side. Prior to the time we came into court in connection with the objections [114] made by one side or the other to questions I ruled on those questions and so today you will have the testimony of Mr. Bade.

Now, it is entitled to the same consideration as you would give to the testimony of a live witness who appeared in court. Now, under our procedure here Mr. Harold Hart will be Mr. Bade. In fact, he is going to be all the witnesses and the questions will be propounded by Mr. Cunningham or, if he desires, by his associate, Mr. Orme Cheat-

ham, and the questions on cross-examination will be asked by Mr. Byron. Of course, it doesn't take a great deal of ingenuity because they merely read the questions set forth in the deposition and Mr. Hart will answer them.

(Whereupon the bailiff took the witness stand to answer the questions in the deposition.)

Mr. Cunningham: Your Honor, I am sorry we have only one copy.

The Court: It's all right. I heard the testimony. All right, Mr. Cheatham.

Mr. Cheatham: Your Honor, may the record show that Edward C. Bade, a witness called in behalf of plaintiff, having been first duly sworn by the Notary, was examined and testified as follows?

The Court: Well, you don't do that any more. It's not [115] necessary. I have already told the jury.

Mr. Cheatham: Thank you, your Honor.

DEPOSITION OF EDWARD C. BADE

Direct Examination

By Mr. Cunningham:

Q. Mr. Bade, will you state your name, age, and present occupation?

A. It is Edward C. Bade; 51; refrigeration service engineer.

Q. For whom are you working?

(Deposition of Edward C. Bade.)

A. I am employed by the C. B. Hill & Company, Incorporated.

Q. Where is your office?

A. It is in Trenton, New Jersey.

Q. What is your territory generally?

A. I have the Western United States, Canada, and Alaska.

Q. Can you tell us just briefly the recent circumstances that led to your appearance here at this deposition?

A. Well, I heard of the matter and that they wanted——

Mr. Byron: I think it would be well if you were to speak up so that the Judge can hear you.

Mr. Cunningham: Yes, a little louder.

The Witness: They wanted some inquiries in regards to this refrigeration equipment, and I am very much interested in it, and I know of——

Q. Who asked you to testify here, and when?

A. Well, I got a letter through my sister, and I picked up another letter at San Francisco through Mr. Cheatham. [116]

Q. How long ago was that?

A. Well, let's see, I think, I would say—the first time I heard it I would say four weeks. It is pretty hard to tell definitely. I have been doing lots of traveling, and it has been pretty near every day working.

Q. Well, now, since that letter was received by you through your sister when was the first time

(Deposition of Edward C. Bade.)

you spoke to anybody on the telephone regarding your deposition?

A. Well, it was last evening.

Q. With whom did you speak?

A. It was with Mr. Cheatham——

Q. With me?

A. With you, and I did——

Q. With Cheatham?

A. ——talked to Cheatham.

Q. Then did you discuss your appearing here with us last night? A. Yes, I did.

Q. Where was that discussion, Mr. Bade?

A. That was discussed at my brother's home.

Q. At about what hour?

A. Oh, I would say around nine o'clock.

Q. To what did that discussion relate, generally?

A. Well, we were discussing when I had worked for the Potter Company and what type of work and what I was doing at that [117] time for the Potter Company.

Q. Is that the Potter Refrigeration Corporation?

A. Yes, it would be called the Potter Refrigeration Corporation. That has been quite a while ago. Even a young guy forgets.

Q. Well, sir, can you tell us about when you were employed by Potter Refrigerator Corporation?

A. Well, it was—as near as I can tell, it was around June, 1929.

Q. Was that when your employment began?

(Deposition of Edward C. Bade.)

A. Yes.

Q. About how long did your employment continue?

A. Well, I think I got out of there around 1932. It was in the early part of 1932, I think, I completed——

Q. What were your duties generally?

A. Well, I assembled first, and then I got into the service and the experimental part of refrigeration. When I wasn't busy with the servicing outside, why I was around the experimental part and whatever things we had we would do to keep busy.

Q. By the way, where was this plant?

A. This was at Ninth and Flanders.

Q. In Portland? A. Portland, Oregon.

Q. Well now, did you become familiar with any experimental work at Potter's? [118]

A. Yes, we were working on—of course, he worked on his compressors, and then lots of this work that I did was quite a bit on the two-temperature refrigeration box that they were developing at that time, and I would work on that sometimes. Other times I might be out as some of the work was experimental on mock-up jobs that they would make to check on loads. At that time we didn't know as near about our loads as we do now. It was more of a cut-and-try deal in figuring how to—we did not have the factors that we have now and also the type of equipment you have to make——

Q. Can you recall, Mr. Bade, any of the other

(Deposition of Edward C. Bade.)

people who were familiar with this experimental work?

A. Yes, there was a man by the name of Jim Thompson, but mostly I worked with a man in the experimental, with Eddie Hermann and Mr. Bronaugh, and, of course, Mr. Potter was in there.

Q. Is that Mr. Lewis J. Bronaugh?

A. Yes.

Q. And Mr. T. Irving Potter?

A. T. Irving Potter, and the only thing I know Eddie Hermann is by Eddie Hermann, and Jim Thompson, he was out, and also they did lots of machine work at Fouch Electric, and there was a man by the name of Bittner. He was not really interested, but he would be over there a lot and see what we were doing.

Q. By the way, I give notice on the record of adding [119] Mr. George W. Bittner's name to our list of witnesses. He will be able to appear at the trial, we believe.

The Witness: And there was, oh, Bartlett.

Q. Jesse Bartlett?

A. Jesse Bartlette, and of course, Elmer Steele. I just found he passed away.

Q. Well, now, Mr. Bade, what is the earliest recollection that you have of work on these experimental household refrigerators?

A. Well, I would say it would be, as near as I can recollect, it would be in the fall of the year; probably October, around in there, 1929.

Q. That is of the year you went to work there?

(Deposition of Edward C. Bade.)

A. Yes, that was the first that we had. We had, oh, other work we were doing that I remember. There was, oh, they had things they were working on, and we would assemble the parts and make mock-ups. Then we worked on that through the winter. It was a little slow first, and, as near as I can remember, I would say I installed one at Gearhart, Gearhart, Oregon.

Q. When you say "one" you mean a two-temperature refrigerator?

A. Yes, a two-temperature box that was actually worked as a two-temperature box. It held, like you would have frozen food now, it would hold it at zero or lower if you wanted to run it that cold, and the top compartment would run, I would say, from 33 to 48. You could adjust it. It was [120] adjustable, and it would defrost automatically on off-cycle, the top, the food holding compartment, and your freezer compartment, the freezer compartment would remain frozen.

Q. Can you describe a little for us in your own words the construction of these experimental household refrigerators?

A. Well, I can some. We had an iron type. We had a brine tank that was tin, and the brine tank had tubing wrapped on the inside of it which would chill the brine, of course, to hold the temperature in the bottom, and that was insulated a little heavier than the top due to the heat transfer in the top parts, and they had a fin coil. The very first one, as I remember now, had a cast iron coil. That was

(Deposition of Edward C. Bade.)

about the first one. We had to jerk that out due—we couldn't get it tight. This refrigerant was methyl chloride, and it was hard to hold. All we had was litharge to hold it. It did not hold very good so we took that out. We got hold of a copper fin coil called a Larkin coil which we split in the middle and mounted that in the top.

Q. Did you have anything to do with splitting that coil?

A. Yes, I did. I helped cut that coil in two.

Q. When did you do that to your best recollection?

A. As near as I can figure, that was, like I say, around, it would be around October. It was all done that time because we had—I think I applied quite a lot of time to that job then because we wanted to get the thing operating. [121]

Q. Did you ever see anybody, and if so who, taking any temperature readings in connection with this box?

A. Yes, Mr. Bronaugh and Eddie Hermann, Mr. Bronaugh—we had a chart worked out, a card that we were recording temperature between the two boxes and what they read at different intervals of time, and in the mornings we would always catch it the first thing, and then we would come in during the daytime with the opening and closing of the boxes, and then later we had recording thermometers that we got, but at first we didn't have one that would go down low enough for the low temperature

(Deposition of Edward C. Bade.)

stuff because at that time—oh, they had them, but they just were not accessible to the trade.

Q. Do you recall what type of recording thermometers?

A. Bristol was the only one we could get at that time in Portland or Seattle or San Francisco.

Q. Did you yourself personally ever take any readings?

A. Yes, I have changed quite a many charts on those instruments.

Q. Do you recall what type of valve was used on this experimental job?

A. Well, yes, we used a—there was two different valves we would use at that time. We used an automatic expansion valve, and we also used a thermostatic type, and we had changed that and gone back to the automatic valve due to the top spilling over and flooding out the compressor when it [122] got warm because the valve actuated by the temperature of the suction line, and also the temperature in the box, if the rise was too great, why, it would make it flood.

Q. Can you recall, Mr. Bade, what type of cabinet was used in connection with these experimental boxes?

A. Well, as I recall, the very first one, as near as I can remember, we started with a regular ice-box and built it up. We added insulation and took away—we did that by applying Fir-Tex which was easier to work than cork. We could get a tight and because they claimed that the Fir-Tex would

(Deposition of Edward C. Bade.)

make a tight bond as it was put together. Then we built up another one, or, in fact, it might have been two. I am not too clear on this in my memory, but we did build this one that went to Gearhart, and, as I would say, there could have been two of them, but they were not probably just exactly alike, but the one that went to Gearhart, that was built up near the specifications that we had experimented on, and that worked very well.

Q. Well, now, I show you four photographs marked Exhibits GHH, GG, FF, and EE—the markings are on the backs, Mr. Bade, up here—and ask if you can identify those, if you can identify the apparatus shown, if you can?

A. Well, this here one——"

The Court: Wait a minute.

Mr. Cunningham: There isn't much point in showing them, [123] your Honor; he won't recognize them now.

The Court: This can go off the record.

(Discussion held off the record.)

The Court: Back on the record.

Mr. Cheatham: "——and ask if you can identify those, if you can identify the apparatus shown, if you can? A. Well, this here one——

Q. Referring to which? Would you give the number? A. It says E."

The Court: Wait a minute. Get me those and we will just show them to the jury, what he is talking about. "A. It says E."

Mr. Cheatham: EE.

(Deposition of Edward C. Bade.)

The Court: 6-EE.

Read your answer.

The Bailiff. "6EE."

The Court: Yes.

Mr. Cheatham: Beg your pardon, your answer was, "It says E," and I asked, "6"?

The Bailiff: "A. 6EE.

Q. Yes.

A. That was the last, the newest type that we had had at that time, and those were fabricated—this is the inside of this box here, and that is EX. 6FF.

Q. 6FF? [124]

A. And that was fabricated with stainless steel on the inside. I think we had not used too much stainless steel up until that time. Here is another one, is a duplicate of this. It is EX. 6GG, and this is a duplication of EX 6HH.

Q. One open and the other closed; are they not?

A. Yes; that is right, and this has a Larkin fin type coil that we had split, and I notice a dome light in it that I remember particularly because I had to go out and try to pick them up, and we had to use an automobile type of dome light to light it up, and used our switch in there when the door opened.

Q. Mr. Bade, what was the practice, if you know, with respect to drawings made in connection with these early experimental models, the first ones?

A. Well, Mr. Bale was draftsman, draftsman-

(Deposition of Edward C. Bade.)

engineer at that time, and he would sketch out stuff and then would lay it out to scale, and we would get in the drafting room, and I think lots of us had—we would get ideas, of course, and we would go in there and talk to him, and I think Mr. Potter and Mr. Bronaugh and Bale had worked out probably the dimensions on some—I know Mr. Potter's ideas were a lot along those lines because we had all—we never knew exactly what the loads would be on the refrigeration. It was figured, but it was not figured to the extent to where the coil would defrost properly, and that is why we made the mock-ups, and these jobs here [125] come out, and they worked with—we had an air switch then. That was about the only thermostat available that you could reach in and turn and make it accessible and anybody could read, and it would vary the temperature in the top of the box more really than in the lower. The lower part was fairly constant.

Q. Was that Mr. Charles W. Bale?

A. Right.

Q. Do you know where he resides?

A. Well, I don't know now. I think it is in Portland here.

Q. Portland? A. I haven't talked——

Mr. Cunningham: That is all, Mr. Bade. The witness is with you.

Mr. Ramsey: Thank you.

(Deposition of Edward C. Bade.)

Cross-Examination

By Mr. Ramsey:

Q. Can you identify the two refrigerators identified as Exhibits EE, FF, GG, and HH?

Mr. Byron: There is a 6 before that mark.

Mr. Cunningham: 6.

Mr. Ramsey: 6.

The Witness: Yes, they are the ones that we had in the experimental room at Ninth and Flanders.

Q. When were they made? [126]

A. These were made, I would say in—Well, just in the start of 1930. As near as I can tell, it would probably be around April or May, in there. I can't tell you—because I know it was shortly after I went to work. In other words, they had had this all planned, and I think they could have probably been in the making. I don't know for sure, but I know they had them made and set up, and we got to work and we worked to complete them so we had a finished product. They wanted it for some reason.

Q. You spoke of one box being sold and installed at Gearhart, Oregon. Do you remember the purchaser's name?

A. I think his name was Barry. I can't remember too sure on that, but I am quite sure it would be. This has been a long time ago.

Q. I can appreciate that. You made a visit to

(Deposition of Edward C. Bade.)

Gearhart and serviced the box after it was installed?

A. Yes, I did. My folks had a place at the beach at Gearhart, and I think one Sunday I went down there and took a look at the box, and there wasn't anybody home, as I remember this pretty clear now, and I think I had my brother with me. I am pretty sure.

Q. Would you recognize if I said that the man's name was Jack Barry, would that ring a bell in your mind?

A. Well, it sounds that way, yes.

Q. Do you know whether he is in the insurance business in [127] Portland, Oregon?

A. I don't know whether he is now, but I think then he was connected with it. I am not too sure on that.

Q. You say you remember a visit at Gearhart at that time. What year was that?

A. That was in 1930, and when we went down there it was—well, it was not too long after we had installed it the first time, and then I think I got a call on this. They had had quite a heavy wind, as I remember, because I think that was the reason we went down there.

Q. Can you remember whether it was cold; was it wintertime, spring, summer, fall?

A. Well, it wasn't cold, I wouldn't say, and in fact we had better weather then than you do now. There was more sunshine.

Q. Frequently do. My question was can you re-

(Deposition of Edward C. Bade.)

member because you say you remember well, could you remember what time of the year it was by the weather or any condition or anything?

A. I would say it would have been in the spring.

Q. You couldn't say it was early spring or late spring?

A. No, exactly I couldn't tell you that. It was—it was around June probably. I can't tell you exactly.

Q. But you remember the year definitely was 1930?

A. Yes, I would say I know because my dad went down with me one time, and I had the truck, and we were down on the beach, and we picked up a log on the beach, and it was so heavy [128] that we rolled it up.

Q. When you were down at Gearhart did you meet and get to know Mr. Barry?

A. Well, I would say know him. I knew the man because I talked with him a lot. They were interested in hunting, and I sure was, but I never got a chance to go with him.

Q. You say that the Barry box is that represented by either of these pictures?

A. No, it isn't, no, the Barry box was a little different box than that. The inside was about the same, but the outside, as I remember, was—well, you might say like darker than that. It was not a white, I am pretty sure.

Q. We are thinking more of the construction.

A. Yes, the construction as far as principle,

(Deposition of Edward C. Bade.)

it was exactly the same because it couldn't operate any different because the compressor would run and do the same as this. The compartments were divided. They would have to be divided.

Q. Divided vertically or horizontally; can you remember that?

A. That I can't tell you exactly. It might have been vertically, and yet I can't tell you for sure on that. It could have had a double door, one on the top and one on the bottom. It could have been that way. I can't remember that clearly at all. I wouldn't try to because—but I do know that the bottom compartment was separated from the top which had a fin coil in it, and the bottom part on that one [129] I could be quite sure was a brine tank with fins. I am quite sure on that.

Q. That is in the freezing compartment?

A. Yes.

Q. Now, your memory is quite clear that around the freezing compartment that that insulation was substantially heavier?

A. Yes, it was heavier in the bottom.

Q. No, I mean heavier with respect to the insulation around the top part.

A. Yes, I am sure on that because I think on that one we figured a little heavier insulation due to the heat exchange in the top to get your self-defrosting.

Q. Did you make calculations?

A. No, I didn't make any calculations. Charlie Bade and Mr. Potter and I guess Bronaugh and

(Deposition of Edward C. Bade.)

Hermann. I guess in all we just, we figured a certain amount of thicknesses, and we put it in there and tried it, and we would use gauges and thermometers to tell us what we were getting because a certain gauge pressure will—at that time we did not have the charts worked out. Now, we do.

Q. In other words, you used the thickness of insulation that appeared appropriate to you as refrigeration engineers?

A. Yes, I guess that is what we would call them, yes.

Q. Or people in the refrigeration business?

A. That is right. [130]

Q. Then you would sort of cut-and-try to see whether it worked out?

A. Well, it was experimental just like they do in any other factory. Our factory does the same thing today. They try it and we have a room that we make weather, and we do lots like we did then except it don't take so long, we have more instruments now to tell us.

Q. Continuing now with this Barry box which you say was made either late in 1929 or early in 1930——

A. Well, it was made, I would say, in 1929 because it had been run there, and it had been used and then it was—they were talking something of painting it. I think the inside would have been. I can't be too sure on that.

Q. It is not too important.

(Deposition of Edward C. Bade.)

A. I say I can't be definite, but I do know that box was made, and it worked out, and somehow or other I was asked if I would go to Gearhart and install it, and I——

Q. Do you know whether Mr. Barry had any connection with Potter Refrigeration?

A. That I couldn't tell you; that I wouldn't know because I don't know whether he did or not.

Q. I mean, would you say he was just an ordinary customer that would come in——

A. Well, I would say, to me he appeared that way. I didn't know him to be anything else. [131]

Q. Between the time that this Barry box was completed, where did it stand before it was purchased by Mr. Barry?

A. Well, in the experimental room in right where you see these pictures here for a while, and, as I remember right, it was over against this other wall. This is—in other words, this wall here would be, as I remember, would be looking north. I think the Barry box—of course, I can be wrong, but I mean that is just the way it appears to me, and I know it was in that room with these boxes.

Q. Was it out in front where customers could see it?

A. Well, at first, no. Afterwards, why, we had it out where people would look at it. We had it out in the shop, and then they used to go in there also.

Q. The customers?

A. Some people would come in there. Like I

(Deposition of Edward C. Bade.)

say, I wasn't there all the time, but there was some times that they would come up and look at it. I can't remember who they were, but I know some of the people came up there to look at it.

Q. In other words, it would make no difference at this late date whether it stood inside of the wall or stood outside of the wall?

A. That is right.

Q. People went in on both sides, customers did?

A. Yes, I think they went in there. Well, they had to go through one door to get in that room. It was one big door. [132]

Q. Do you know whether they were trying to sell that one to the public?

A. No, I don't know whether they were or not. I didn't pay attention to what they were selling or anything. I was interested in refrigeration.

Q. Your work, in the main, was service work?

A. Service, installation and also assembly.

Q. Primarily service and installation?

A. Right.

Q. And that work that you describe was——

A. Experimental work.

Q. Experimental fill-in work when you were not busy otherwise? A. That is right.

Q. So that you would be away from the plant a good deal, and you would not charge your mind too much with the details of sales and things like that?

A. That is right, the sales part, why, I wasn't—I was interested in the mechanical end.

(Deposition of Edward C. Bade.)

Q. That is right. Let us pass to that subject. You have a clear memory, I gather from what you have testified in chief, as to exactly how this Barry box was built, and that has stayed with you for——

A. Quite a while.

Q. ——the last twenty-five years?

A. Yes. [133]

Q. You spoke of two different kinds of controls, one an automatic? A. Yes.

Q. And another thermostatic. Do you know which type of control was in the Barry box?

A. Yes, I changed that to an automatic.

Q. We are only lawyers and do not know what an automatic valve is.

A. Well, an automatic valve is a valve that is set. You set the pressure on it to whatever amount of pressure that you would want. By going through a cycle you will know whatever back pressure, whatever pressure that is set, you will know what temperature you will get inside your coil, and we in running the job and checking on it, we knew about what the pressures had to be set because you couldn't just go and set it—nowadays I can take a box like that and set that valve and wouldn't probably have to go look at it again, but at that time we didn't.

Q. Would you say that it was a valve probably having a spherical outline?

A. Yes, it was, it was round. I can tell even, I think, the make of the valve. It was a Detroit Lubricator.

(Deposition of Edward C. Bade.)

Q. Would it have a diaphragm extending diametrically therethrough?

A. Yes, it was a bellows. No, the bellows didn't go clear [134] through. It had a bellows that was actuated by a screw which in turn actuated a needle against a seat.

Q. Did a spring oppose the action of the screw?

A. Yes, you pushed against the spring tension because otherwise the pulsation of your pump would rock the—we would not have an even control.

Q. I show you this sketch to see whether this is similar to the type of valve that you are describing.

A. Well, that looks something like an automatic valve, yes.

Q. Was the one you put in the Barry box substantially like that?

A. Well, the one that I had installed down there I took with me myself. I bought it out of a parts house.

Q. If it differs, would you explain how it differs?

A. Well, mechanically it did not differ very much. The only part that differed on it was that it was a little longer, and it was—it was not a round one like you have this type here.

Q. It differs——

A. But the mechanical part of it is identical in this valve and the one that was in there. They couldn't work any different because your law of mechanics would not let it work any different.

(Deposition of Edward C. Bade.)

Q. Then on one side of this bellows or diaphragm—is there any substantial difference between a bellows and a diaphragm? [135]

A. Yes, there is.

Q. You might explain that.

A. A diaphragm has two plates or more. It has more than one. One is concave, and the other one is opposite, and it is in a plate form. Your bellows is made like an accordion. It has little round pleats in it, and that is spun out in the length to take care of expansion and contraction. In other words, you can use a bellows, or you can use a diaphragm. Now we have more diaphragm valves than we do have in bellows for expansion valves. I think every manufacturer right today makes a diaphragm valve. I mean as far as what you would use in a valve like that, the principle of them is pretty near the same. Some of them are just a little different; some of them have an adjustment that they adjust for different pressures and different limit pressures which we never even thought of in those days. We have things come up today that, brother, if we had thought of them a little better than twelve years ago we would have been rich in the refrigeration field. [136]

Q. On one side of the bellows is an intake refrigerant line?

A. Yes, your intake comes in——

Q. Pardon, on the other side is a compression spring?

A. Right; and the needle in a seat, or adjust-

(Deposition of Edward C. Bade.)

ment. The needle and seat is on the other side of your valve which comes in and adjusts, and it has a pin and a lever in there which adjusts the needle and seat which allows the amount of refrigerant or pressure that you want to set there by turning the adjusting screw.

Q. So, then, by turning the adjusting screw you oppose the pressure of the incoming refrigerant; is that correct?

A. You can adjust the pressure by that adjusting screw on the end of it.

Q. And that controls the discharge from the valve?

A. That controls the amount of refrigerant that you would use in that certain amount of coil you have or whatever you were using.

Q. Now we are thinking in terms of the Barry box.

A. Yes, we used that, and at first—now you're talking about that one you have in there. We did have an old one. That was an old Detroit. It was not called Detroit Lubricator then. It was called American Radiator, which is a round type, I think, like you are trying to describe there. The fact of the matter is, I believe over in my basement in my brother's [137] place I have still got some of that old junk.

Q. Then refrigerant flows from there into your freezing coil?

A. Yes, into—goes into the brine tank and from the brine tank——

(Deposition of Edward C. Bade.)

Q. But that was a freezing coil?

A. Yes, in the bottom.

Q. And the brine tank merely means that the coil was immersed in a quantity of brine?

A. That is right. Later they used it dry.

Q. I was thinking now of just the Barry box.

A. Yes, the Barry box, as I remember it, was brine.

Q. Thank you. Then the refrigerant passed from there up through the vertical pipe or conduit?

A. There was a pipe.

Q. To the cooling coil? A. Right.

Q. Then it went to the cooling coil. Now, you spoke of taking readings and, naturally, cut-and-try adjustments? A. Yes.

Q. You were trying to control the amount of refrigerant flowing through the cooling coil in exact relationship?

A. We were controlling that with the temperatures. In other words, if you would take any box and open the valve wide open you would raise your temperature and flood your [138] pump with refrigerant so that was the need of the valve.

Q. If you flooded it, that would mean that would reduce the temperature of the cooling compartment too low?

A. No, no; you could still have a cold temperature in there with brine. It would be a little longer in pulling it down, but it would be a longer hold-over, too.

Q. Just so that we are talking about the same

(Deposition of Edward C. Bade.)

things, if we talk about freezing coil and cooling coil, now I am speaking of cooling coil.

A. The one in which food——

Q. Of the food compartment.

A. That is right.

Q. When you say it would spill over, that would mean that it would not evaporate?

A. No, it would evaporate, but it would go over in your compressor. The front line would go to your compressor.

Q. In this Barry box about how much refrigerant, liquid refrigerant (I know it is in small quantities), about where would that go with respect to the cooling coil? Some of it would be partly liquid.

A. Oh, it was in the receiver. The refrigerant was in a receiver, and, as I remember right, I think I had four pounds in that, four pounds of methyl. We had quite a large receiver. It was made out of—well, they made some of them, and they were made out of pipe. We cleaned them and [139] sealed them and put valves on them.

Q. That would be on the discharge side of the cooling coil?

A. That would be on the high side. That is called the discharge side.

Q. The intake side?

A. That would be your liquid or feed line valve, and it is on the discharge side of the compressor. That is called the high side.

Q. Now, the amount of liquid refrigerant flow-

(Deposition of Edward C. Bade.)

ing into the cooling coil or what you call a so-called fin coil——

A. Yes.

Q. ——there would be quite a bit of liquid, dispersed liquid particles, that are evaporating in that fin coil?

A. Oh, yes; you would have—I couldn't tell you in weight. We had, I would say, a good, oh, methyl don't travel too fast. We would have around probably two pounds in the receiver. It would be around in that, and in the brine tank naturally you absorb a little more refrigerant than you would a dry expanded coil, so the amount of charge that was in the machine would not have too much to do with it. If you had a larger receiver you could put twenty pounds in it because you would only be feeding so much in, whatever you calibrated that job or whatever your need was of that top compartment.

Q. You spoke in observing this Barry box or generally in [140] any similar box that the frost line could extend entirely over into the discharge line?

A. Well, no, it would not extend to the discharge. It would go to the suction, suction of the pump.

Q. Suction line?

A. Yes, the discharge we always termed the high side, refrigeration men.

Q. We will say to the low side.

A. That is right.

(Deposition of Edward C. Bade.)

Q. It would not go past the cooling coil or to the low side?

A. It could if it was not properly adjusted.

Q. In adjusting these valves doing this experimental work I presume that you watched for frost line?

A. Yes, afterwards, after we got to knowing just about how much we had and it was figured out right, why, we got so that we didn't have that trouble.

Q. But in your test work you would see where the frost line extended?

A. Well, we would keep it inside the coil, yes, inside the box.

Q. I presume if insufficient refrigerant was flowing up there the frost line would not be visible even on the lead-in side of the cooling coil?

A. Well, your job would run continuously if it was not [141] calibrated right.

Q. Well, then, exactly where in this Barry box did you set that frost line?

A. Well, we would come out of the bottom and into the top coil.

Q. Would we pass the top coil?

A. Oh, no; you would just use the top coil. There would not be any use to go past the top coil because that is where you get your efficiency out of the job was because when the machine would cycle it would carry just a perfect humidity. In a certain amount of T.D. temperature degrees, the thermostat would kick over, turn it on again, and that coil would

(Deposition of Edward C. Bade.)

be completely defrosted except for maybe if it was real cold we would set that around 32 degrees, which is frosting, and would have just a bead of ice which is something it would take a very good box you buy today that you would have; I don't believe you can buy one. I got one I wish somebody else had.

Q. In other words, the way that you adjust the degree of frost is by setting this valve?

A. The amount of tubing and the amount of length were all figured out later. Like I say, we cut-and-tried a lot of things, a lot of this stuff, and after we tried those things they seen that they had a basis of engineering.

Q. Yes, but you would adjust it with the valve in the [142] expansion coil?

A. In the bottom part of the box.

Q. You might vary the frost line without—almost no limit?

A. Well, if you had horsepower enough, why, you could stretch it all over the room if you wanted to because it would still be an evaporative coil.

Q. You talked of one box that you said was covered with Fir-Tex. I gather that was one prior to the Barry box?

A. Yes, that was, as I remember, that was the icebox that we converted and tried. We used it first. They didn't want to go to the expense of building something and not have readily—you might engineer it after a fashion, sure, but at that time, why, it was like everything else. Refrigeration engineers didn't know any more about it than anybody

(Deposition of Edward C. Bade.)

else, and it was just like Frigidaire when we first started—this may be out of the picture but it shows you how things will operate—we started to run meat boxes on that defrost cycle. Frigidaire come along and said we were all wet, it would never work. Well, we used that system for months before they ever adapted it, but they later adapted it and, boy, that was the only thing, and that was the way in this box here, why, a lot of people would say it would never work——

Q. Do you remember, during this experimental period about [143] which you are discussing, a display case to be used comparatively?

A. We did have some display cases, yes.

Q. Do you remember—if I would ask you about a Frostaire, does that mean—do you remember that model?

A. I can't remember. I can't tell you about the model. I can't remember that.

Q. Do you remember that there was a display case down there that was set alongside of that Fir-Tex box, and it was—pardon me: it is Supercold.

A. Oh, yes; but that wasn't—that was only a single-temperature box.

Q. This one was a display case.

A. That is right.

Q. It was—— A. It was used for meats.

Q. You are sure that it was not two temperatures?

A. I am quite sure it was not. The only two-temperature it might be would be still from the top

(Deposition of Edward C. Bade.)

of your box to the bottom, which any showcase at that time they couldn't control temperatures and humidities like we do now.

Q. You spoke of Mr. Steele. Would he have a better chance of observing that than you would, or would you have a better chance?

A. Well, that I can't tell you because I was out lots of [144] times, and he could have been in there, but I don't know whether he was in there. I can't tell you.

Q. You are not certain whether it was a one-compartment box or a two-compartment box, but it might have been a box with one compartment which was freezing and occupied a third of the capacity of the showcase and one for meats which was a cooling compartment which occupied maybe two-thirds of the compartment? Does that recall it to your mind?

A. No, it does not. I don't remember any Supercold or any box other than what we had that was a two-compartment box. I can't truthfully tell you that. I mean, I know we had—I think we had a Supercold case.

Q. You remember a case setting out there in the experimental room?

A. It was taken in on trade on one of the boxes that we had installed. You know, we built showcases, too, for grocery stores, and we used that coil and we used the defrost setting. In other words, I think we were about the first ones to use that. The fact of the matter is they demonstrated by keeping

(Deposition of Edward C. Bade.)

hamburger, and that is about the only thing that I can tell you truthfully about the Supercold box because I do know this, that Supercold come out later, and Potter were about the two first self-defrosting commercial boxes. Then Birkinwald built them, and they were built with prime surface tubing which was operated on the same principle that [145] that was for meats.

Q. I know we were told you were in a hurry to get out of town, and it is a matter of personal inconvenience for you to stay.

A. It is. I am just swamped with work.

Q. So for that reason I am trying to make it as short as possible and still get the information for the deposition.

You would not say that there was no Supercold case there and that Supercold case was not in two compartments and that that was in the experimental room at that time? Your testimony is that you just don't remember it?

A. I don't remember of having one in there being of that type. I remember a Supercold case, due to the tubing of it and the bins that were on it. They were a cast-iron bin and that—I can't tell you any different because it is the only Supercold I remember working on, and I have worked on lots of them.

Q. Thank you. You were talking about certain tests being made and charts being taken, graphs being made? A. Yes.

Q. You have no memory that you personally

(Deposition of Edward C. Bale.)

made comparative tests on this Supercold display case and the so-called Fir-Tex box?

A. No; no, I don't. The only tests I took checks on were on this type of box that—is right in here, and it is the [146] old one in the icebox and as well as the Barry, and then, of course, when they got these, why——

Q. These boxes that you have before you identified by the pictures 6-EE to 6-HH were made, you believe, in 1930? A. Yes.

Q. They were made from drawings made by Mr. Bale? A. Yes.

Q. So that they followed from Bale's employment by Potter?

A. Well, yes, it was through Potter and Bale that they designed these boxes. I know because I would go in there in the mornings, and sometimes Charlie Bale would be in there before we got in there, and he would be working on different——

Q. So these boxes, 6-EE to 6-HH, were made after Mr. Bale was doing engineering work at the plant at Ninth and Flanders?

A. Mr. Bale was there; I guess he was. I can't tell you exactly, but I know he was there when I was in there. I am pretty sure.

Q. When you are speaking of Mr. Bale, it was while he was employed and had his drafting room down there at Ninth and Flanders? A. Yes.

Q. Thank you.

A. I am sure—like I say, everything that went through there, drawings and everything, he is not a

(Deposition of Edward C. Bade.)

drafting engineer, I know everything would surely—I know he was drawing up [147] lots of different things, and we had different things that we would discuss.

Q. I am sure he did. You were speaking of this Larkin. Was that a standard coil at that time?

A. At that time that was about the only fin coil you could buy. Oh, Fetters had some, but we never had too many of them here. I think Larkin in this part of the country was about the first one that come out.

Q. That was a more or less standard coil?

A. Well, it was a new type of coil; no, Larkin was something new in the refrigeration business then.

Q. About how long had it been on the market then?

A. Well, I would say maybe a year or so. I don't think it was over that because the way they pressed the fin on and then—of course, they have used fin materials and cast-iron pipe for years, but this was a copper coil. Some of them had aluminum fins, and, as I remember, some copper. I know we had two types. The way they extruded the copper tubing in it, they had a patent on that, I am sure of that.

Q. Did you buy this coil, or was it just supplied to you to cut? A. It was supplied to me.

Q. You say you cut it in half. Was it cut across the narrow—was it so that it was just half as long as it was—— A. No, half as thick. [148]

(Deposition of Edward C. Bade.)

Q. Half as wide? A. Yes.

Q. Then the fins would extend only out to one side of it?

A. No, we had enough so that it was cut—as I remember right, we had it cut pretty even.

Q. Was it longer than it was wide or it was wider than it was thick?

A. Yes, it was deeper; I will say it this way, it was deeper than those.

Q. I was trying to get dimensions, that the record may reflect it.

A. I can't give you the exact dimension, but I could give you approximate.

Q. I don't care. I know that after many years and your interest being on many other things, I was just trying to find out how it was cut.

A. No, it was cut with the deepest——

Mr. Byron: Lengthwise?

The Witness: It would be lengthwise of the coil.

Mr. Ramsey: Lengthwise of the coil, midway between the two margins?

A. Yes, that is right. If they had to have a coil made, it would have taken time to do it. They could have had a coil made that they wanted, but we cut it because time was the thing that we were interested in. [149]

Q. Do you know what supply of coils were in Portland of the Larkin make, whether they were a large range of sizes, lengths, fins?

A. Oh, they had quite a few at that time, I think. I don't remember who else carried any. There

(Deposition of Edward C. Bade.)

wasn't anybody else carried much. There wasn't any refrigerator parts houses at that time. You had to send back East for about everything that you had, and some of them in Southern California, but very little, very limited.

Q. The only point I am trying to find out from you, Mr. Bade, is you cut it in two because it was—you found one a standard piece that was——

A. Well, it wasn't exactly a standard coil. As far as any standard, there wasn't any standard to it.

Q. That was not my point. I mean you found a size. A. Yes.

Q. It had twice as much radiation area than what you wanted so you just cut it in half and fitted it? A. That is right, yes.

Q. Then I presume you soldered it?

A. I think we soldered the return bin in on that. We had one return bin. I can't tell you exactly.

Q. In other words, you wanted to use half as much radiation as that would afford?

A. That is right. [150]

Q. You cut it in half, and you made it work. If you cut any pipes, why, you fixed them?

A. That is right.

Q. Thank you. I believe that you testified that the Barry box had the refrigeration mechanism outside of the box rather than in the box?

A. It was removed. I put the unit in what we called the basement, as I remember it. First he wanted another size. I remember it was in the basement.

(Deposition of Edward C. Bade.)

Q. But it was not a self-contained box?

A. No, it was not a self-contained box.

Q. You spoke of a brine tank. I am a little confused. Are you talking about a brine tank in the freezing compartment or one in the cooling or food compartment?

A. It was in the freezing compartment.

Q. Didn't you use a brine tank or a cold wall in any of that experimental work?

A. Well, you could call that brine tank a plate which they made millions of them——

Q. I am only asking. You see, I was not there.

A. Yes.

Q. You were there, and I am asking you whether any of this experimenting that was done there at that time and that you are familiar with, was there any experimental work done with the cold-wall type rather than the fin-coil type that you [151] know of?

A. Not that I remember.

Q. Thank you.

A. There might have been; like I say, I can't recollect anything like that.

Q. In the Barry box you said substantially the same things were present as in the boxes made afterwards following the drawings of Charles Bale. I presume that that would include a substantial food compartment? A. Yes, yes.

Q. And a freezing compartment?

A. And a freezing compartment.

Q. Ice trays in the freezing compartment?

A. Yes.

(Deposition of Edward C. Bade.)

Q. They were arranged in a sleeve?

A. Well, they were arranged, you might call it a sleeve, yes. They were put in the tank.

Q. In the tank, yes.

A. In a compartment for the ice cube trays.

Q. The freezing compartment was, did I understand it would go down to about 15 degrees?

A. Well, yes, I think we had it down to 15 degrees at times.

Q. That would be the lower limit?

A. Well, I would say that would be below zero, yes.

Q. Fifteen degrees below zero? [152]

A. Yes.

Q. Not 15 degrees Fahrenheit, above zero?

A. No, 15 degrees below.

Q. Fahrenheit, below zero?

A. Yes. In the ice cube trays I remember we took ice cubes out. Eddie Hermann did one morning, and he would run water on them, and if you know something that gets real cold, it will completely take all the air out of it and put it in water, boom, it will just crackle, and if you have ever been up in cold country like I was it is just like it—it would bring the cube way up.

Q. I think that you typified the Barry box as a good usable box?

A. Yes. I do not think that there was too many boxes at that time that would—you could not duplicate it, I know that. In fact, there wasn't any that I know of.

(Deposition of Edward C. Bade.)

Q. I mean, just elaborating on that, by a good, usable box, that is one that had worked satisfactorily? A. It seemed to.

Q. And you were down there more than once to Gearhart?

A. Yes, I have checked the box. When I would go to the beach, I would take a look at it.

Q. A half-dozen times regularly?

A. Well, I might have, yes; I can't tell you, but——

Q. Each time that you checked it, it worked satisfactorily? [153]

A. It seemed to, and I have been, like I say, a couple of times there was nobody there when I got in.

Q. I understand that covered a range of time of six months maybe?

A. Yes, it could have been.

Q. A year? A. Yes, it could have been.

Q. After that, I presume that you didn't see it any more?

A. No, I didn't hear any more about it until, oh—it could have been another box, I don't know, but I doubt it, and it was resold, and a refrigeration fellow called me up, knew that I had been working on it, and wanted to know how to adjust it. I said, 'Well, there is no adjustment that is hardly necessary. You just set that expansion valve at so many pounds by your gauge, and you can forget it.' He called me up the next day. He said, 'Boy, that is all it took.' As long as you had refrigerant in it,

(Deposition of Edward C. Bade.)

why it operated like a million because I remember the setting on it. I think it was 2½ or 3 pounds. That would be pretty close.

Q. That would be the adjusting of that screw that we were talking about?

A. Yes, you would adjust it. I do not think we put any out—I don't know, they might have, with the thermostatic valve. They might have, but if they were I think we changed some of them due to your valve opening up. [154]

Q. But whether they did or did not, they all had some range of adjustment?

A. Well, it would be impossible to work any kind of refrigeration machinery without some sort of metering device.

Q. An adjusting device?

A. Yes; you couldn't run your car without carburetor which adjusts the gasoline.

Mr. Ramsey: That is all.

The Court: Mr. Cunningham.

Redirect Examination

By Mr. Cunningham:

Q. Mr. Bade, you mentioned on your cross and I believe also on direct some converted old iceboxes that you tried out. That was before the Barry box, wasn't it?

A. Oh, yes; yes, that was. The Barry box was not built until they had tried and checked up on their, on the compressor load and different things

(Deposition of Edward C. Bade.)

that we tried. We had watt meters. We took current reading. That is the honest way to check horsepower, is by current readings, so many watts make a horsepower, and that is it.

Q. So that, as I understand you, when they built this Barry box, they were quite well convinced as to their design and what they were going to do; is that right? [155]

A. Yes it was a two-compartment box. It carried the low temperature in the one compartment which was at the bottom, and the food carrying temperature in the top, which would be above, we will say, 33 degrees because 32 degrees a lot of people think it is freezing.

Q. Mr. Bade, you testified, as I recall it, that you went to work for Potter in June of 1929; is that correct?

A. That is right; as near as I can remember that is about it.

Q. What had you been doing before that? What had been your employment before that?

A. Well, I had worked in refrigeration, and I had also done aeronautical repair work, motor work, building airplanes, machine shop practice. I had been in the machine shop; I served my apprentice at Coin Machine Company. It is called Iron Fireman now, some training that was very good, I will tell you.

Q. How long after your employment started in June of 1929 did this experimental work continue with these converted iceboxes?

(Deposition of Edward C. Bade.)

A. Well, the iceboxes I don't think, we—I don't think it was two months that we used the old iceboxes because it was right around, oh, around Christmastime, as I remember.

Q. By the way, do you recall whether any of those old converted iceboxes before the Barry box were sold, or do you [156] know anything about it?

A. Well, I couldn't tell you about that. I don't 'know whether they were. I doubt if the converted ones were sold. I don't know, but I doubt it.

Q. You do not know of any that were sold?

A. No, I do not.

Mr. Cunningham: That is all.

Mr. Ramsey: No further examination."

The Court: I guess that's all.

Ladies and gentlemen, we have gone over a little longer than we anticipated so we will adjourn now until 9:45 tomorrow morning. Please remember my admonition, don't make up your mind as to how this case should be decided and don't talk about it to anyone else.

You are now excused.

(Whereupon the jury was excused.)

The Court: Are you going to read depositions tomorrow?

Mr. Cunningham: Well, your Honor, I think perhaps Mr. Bartlett, we might put him on early for a short time, and I am really not sure until we get back to the hotel who else might have come in.

I think if we have live witnesses I would like to get rid of them while they are here.

The Court: All right.

Mr. Cunningham: Then I would like to take the depositions up when we don't have live witnesses.

The Court: That's a very good idea.

All right. Adjourn until tomorrow morning.

Mr. Byron: I know it's a little late and you most certainly want to go home. There are a few depositions in which Mr. Cunningham and I are having a little discussion. Your Honor was going to read a few pages at the end of one deposition to see.

The Court: Which one was that?

Mr. Cunningham: Bommer, if your Honor please.

The Court: I will take a look at it.

Mr. Byron: Mr. Cunningham brought a motion to strike and, of course, I am very much opposed to that because it is a very material and vital matter, your Honor; it goes right to the merits.

The Court: I will take it up, the deposition of Bommer.

Mr. Cunningham: It's the very last page, your Honor. It is his entire redirect.

The Court: I will take a look at it. You are not putting it in tomorrow?

Mr. Cunningham: I think I should put in the deposition first.

The Court: Potter will take a day.

Mr. Cunningham: Well, sir, we have done some work reducing it. I don't think it will be safe to

think it would take a full day, I may be wrong about that. [158]

The Court: Well, if this deposition took 45 minutes——

Mr. Cunningham: Yes. Of course, you know the Potter deposition was only an afternoon affair.

The Court: Oh.

Mr. Byron: It was from two to six in the afternoon, two afternoons.

The Court: Two afternoons?

Mr. Bryon: Yes. Over 200 pages.

Mr. Cunningham: We have done, I hope, a creditable job of reducing it.

The Court: It will take at least a full day. It's hard for the jury to listen to it and I think we are going to have to take even more frequent recesses to get the jury to understand these depositions.

Recess until tomorrow morning at 9:45.

(Whereupon an adjournment was taken until 9:30 Wednesday, November 16, 1955.) [159]

November 16, 1955, at 9:45 A.M.

(Proceedings herein were resumed pursuant to adjournment, as follows:)

(The following proceedings were had in Chambers out of the presence of the jury:)

The Court: Gentlemen, we just received a call from Mr. Duyck, Juror No. 2, who is living at Forest Grove, Oregon, to the effect that he has been unable to get in this morning because of the

snow. There was a bus leaving Forest Grove at nine o'clock and the other scheduled to leave at nine-thirty, neither of which buses have yet arrived at the station. I told him to try to get in as soon as possible and get his clothes and remain in Portland, but it's very unlikely he will be here before two o'clock and it may very well be that he won't be able to get in at all.

The other eleven jurors and the two alternate jurors are present here today. I want to know what you propose to do. Have you any suggestions?

Mr. Cunningham: If your Honor please, plaintiff would be entirely willing to stipulate now that Mr. Duyck may read the transcript for whatever he misses and we will raise no objection to his absence.

Mr. Maguire: We offer that in the form of a stipulation. [160]

Mr. Cunningham: We are willing to so stipulate.

Mr. Byron: Defendants are willing to so stipulate.

The Court: As I understand it, he will be furnished with a transcript of all the testimony that he didn't hear and he will get it today or tonight or tomorrow. There is a daily transcript here anyway, and he will receive a copy.

Mr. Byron: Yes.

The Court: All right. With that understanding, it's a little unusual but I know the terrible cost that both sides are incurring each day of trial, and for that reason I will permit the trial to go on with that stipulation, and with the understanding, how-

ever, that this is not going to set a pattern for what might happen if some other jurors aren't able to get down.

Mr. Maguire: I think the stipulation should be enlarged a little to this effect: that the parties, plaintiff and defendants, stipulate and agree that his physical absence during this session shall not be utilized or urged by them or any of them either in the matter of a mistrial or upon appeal. Then I think we have it tied up.

The Court: Is that satisfactory?

Mr. Ramsey: That is satisfactory.

Mr. Byron: That is satisfactory.

Mr. Cunningham: Satisfactory with plaintiff.

The Court: Now, let's go to Ruth Kobernuss.

Mr. Cunningham: Maybe this will save time, since we are going ahead, I don't think we will be able to reach her today.

The Court: Fine. I merely wanted to say this to you, Mr. Cunningham, that I have read her testimony about making hors d'oeuvres and keeping lamb in the refrigerator and these berries and how much money she saved and how she likes her Potter refrigerator, and I haven't been able to find anything of any relevancy.

Now, as I understand the Rule, the commercial success is one of the things that you refer to when you have got a thin patent, when there is doubt as to whether you have a valid patent or not, and it has to be commercial success of the particular invention.

Now, as I understood from your statement to the

jury, you say that there are all old elements here, and I think you also said that Potter was not the first one to have a deep freezing unit, there were other refrigerators or at least commercial refrigerators, and I think there were deep freezes at that time also, weren't there? The invention was a two-temperature refrigerator, wasn't it?

Mr. Cunningham: Your Honor, that's my impression. I just don't actually know now with respect to dates. I am not trying to evade the question.

The Court: I don't understand. There is no contention [162] here that Potter was the first one to develop a freezing unit, is there?

Mr. Cunningham: Well, I think it's safe to say that we don't contend he was the first to develop a freezing unit per se.

The Court: Yes, that's what I am talking about. Now, some of the things about which Mrs. Kobernuss is talking are the advantages of a deep freeze or a freezing unit, aren't they?

Mr. Maguire: Oh, no.

Mr. Cunningham: No, your Honor.

The Court: What——

Mr. Cunningham: Would your Honor reserve that? I want to take a little more time.

The Court: I just wanted to know what type of testimony you propose to have her give.

Mr. Cunningham: Your question, I imagine, is prompted by your doubt as to the relevancy of the testimony.

The Court: Precisely right. I think you are in

pretty good shape so far, and I don't want to start getting error in the record.

Mr. Cunningham: May I point out that her testimony demonstrates what is vital to the case; it's not only relevant, it's vital. It demonstrates how this invention which was embodied in the devices that she sold solved the long-felt [163] problem of the industry. There could be no more vital testimony in any patent case, and it's not pure speculation or opinion, it's actual fact.

Mr. Maguire: Personal knowledge. I have some authorities which I do want to present.

The Court: I would like to look at it.

Mr. Maguire: All right. I will give you citations.

The Court: As long as we are not going to reach that problem today it's all right. Now, what are we going to do—who is your first witness?

Mr. Cunningham: I would like to get rid of McChesney first.

The Court: McChesney?

Mr. Cunningham: I have shown Mr. Kolisch the letter I have failed to mark.

The Court: Is there any objection?

Mr. Kolisch: I haven't looked at it.

The Court: Now, do you know McChesney's testimony? Have you read it in the—did he testify in the Stewart-Warner case?

Mr. Cunningham: No, sir, he didn't. He didn't have his refrigerator then.

May I help you, Mr. Kolisch, Mr. Ramsey? I want to state that I am frank to confess I received

that on October 20th from Mr. Potter, as shown by the letter I have [164] shown you. It got in my correspondence file and I failed to mark it. I didn't put it in.

The Court: Bring the jury down.

Mr. Cunningham: I don't want to offer in evidence Potter's letter to me. I just showed that to you.

The Court: Who is your next witness?

Mr. Cunningham: Mr. Bartlett, who also will be short, and then, your Honor, I plan to get right into the Potter deposition, which will finish us for the day, I think.

The Court: All right.

Mr. Cunningham: Incidentally, if Mr. Duyck misses the Potter deposition, we have got an extra copy he can use.

The Court: Do you want the deposition redone a daily copy?

Mr. Bryon: I am not particular about it.

Mr. Maguire: I would suggest that if the entire deposition, whatever it may be, goes in evidence it isn't necessary to make a copy but if only parts of it are admitted in evidence—I take it there may be instances where that will occur——

Mr. Cunningham: Universal in this case.

Mr. Maguire: All right. Universal. Yesterday there wasn't anything.

Mr. Cunningham: Bale is the only one that I can think of that we are going to use only on perhaps—— [165]

The Court: Well, on Potter you have all agreed

upon what you want. You know what is in there.

Mr. Cunningham: We are leaving out a good part of Potter.

The Court: Yes. But that's all by prearrangement.

Mr. Maguire: Yes. But the difference is——

The Court: But as far as these men are concerned, as far as Duyck is concerned, you don't want them to see the portions that have been deleted. [166]

(In Open Court with the Jury.)

(Discussion off the record.)

The Court: Mr. Cunningham, call your first witness.

Mr. Cunningham: If your Honor please, I call Mr. McChesney.

DONALD F. McCHESNEY

a witness produced in behalf of Plaintiff, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Cunningham:

Q. Mr. McChesney, where do you reside?

A. In Seattle, Washington.

Q. What is your occupation?

A. I am a boat builder.

Q. What is the address of your business?

A. 2901 East 178th Street, Zone 55, Seattle.

(Testimony of Donald F. McChesney.)

Q. Mr. McChesney, do you recognize this old refrigerator that has been marked Plaintiff's 11-A?

A. I do.

Q. What is that refrigerator; what connection do you have with it?

A. Well, that is a Potter refrigerator that I bought and had in my kitchen for about between 18 and 20 years. [167]

Q. How did it get to this courtroom, if you know?

A. Well, I was advised by Mr. Potter that Mr. Cunningham would like to have it shipped down here as evidence, so I shipped it down.

Q. About when did you ship it down?

A. Oh, two or three weeks ago.

Q. Has it been in your possession ever since you purchased it? A. Yes.

Q. I show you a letter, a photostatic copy of a letter, dated September 12, 1931, signed D. F. McChesney, and addressed to the Potter Refrigerator Company, Portland, Oregon. Would you look at that, please (presenting document to the witness)? Did you write that letter? A. I did.

Q. Is your signature at the bottom?

A. Yes, it is.

Q. Does it refresh your recollection as to the precise date when you purchased the refrigerator, Plaintiff's 11-A?

A. Yes, this letter dated September 12, 1931, says that I have had the box approximately a little

(Testimony of Donald F. McChesney.)

less than three months, so I must have purchased it about June in 1931.

Mr. Cunningham: If your Honor please, the defendants' attorneys have very kindly consented to my including this [168] letter on the list of exhibits. I do not want to represent that it is without objection to its admissibility. I do now offer it in evidence.

The Court: What is the relevancy of the letter? The man has looked at it. He recollects the date, and he has testified as to the date.

Mr. Cunningham: May I ask him a few more questions?

The Court: Yes. Is there any objection to the letter?

Mr. Byron: No objection.

The Court: All right, then.

Mr. Cunningham: May it be marked the next exhibit number, Plaintiff's Exhibit 22?

The Court: Yes.

(Thereupon, the photostatic copy of letter dated September 12, 1931, above referred to, was marked Plaintiff's Exhibit 22 for Identification and received in evidence.)

Q. (By Mr. Cunningham): Mr. McChesney, back in the spring of 1931 when you bought this refrigerator did you replace any other electric refrigerator in your household? A. Yes, I did.

Q. What make of refrigerator was that?

Mr. Ramsey: That is objected to.

(Testimony of Donald F. McChesney.)

The Court: What do you claim for that? [169]

Mr. Cunningham: I merely want to show that the type of refrigerator—I want to show the type of refrigerator that this Potter refrigerator replaced in Mr. McChesney's house?

The Court: What difference would that make?

Mr. Cunningham: Well, sir, it is my understanding that it replaced a very well-known conventional refrigerator, dry cold refrigerator, with a moist cold. It shows, it is an example of a replacement sale, and it shows the use of the invention by Mr. McChesney in his household over what was the prior art.

Mr. Byron: That has nothing to do with the question of whether this reissue patent in suit is valid and infringed.

Mr. Cunningham: Oh, your Honor, I think it does. It shows that it solved a long-felt need.

The Court: What solved a long-felt need?

Mr. Cunningham: The invention, your Honor, the Potter refrigerator.

The Court: The freezing unit, or what? I do not know. What do you propose to show by this witness, that it is the moist cold that is the invention or the two-temperature refrigerator?

Mr. Cunningham: Oh, I think he will show that the moist cold feature—he is not an expert in refrigerators; he is a user of a refrigerator—he will show that that [170] moist cold feature was absent from the old conventional refrigerators, and he can name the type so that it can be verified if anyone wants

(Testimony of Donald F. McChesney.)

to verify it; simply the fact that this refrigerator was purchased by him and replaced an earlier refrigerator.

The Court: I do not think it is prejudicial anyhow, so let the witness testify. Objection overruled.

Q. (By Mr. Cunningham): What type of refrigerator did you replace with the Potter, Exhibit 11-A? A. It was a General Electric.

Q. Was that like the refrigerators then on the market, electric refrigerators?

A. Yes, it was a current model, two or three years old.

Q. Did it have any provision for moist or humid cold storage of food? A. No, it did not.

Q. Did it have any provision for the frozen storage of frozen foods?

Mr. Ramsey: Object to this line of inquiry as to the construction of a replacement refrigerator upon the same ground.

Mr. Cunningham: I will withdraw that, your Honor. I would like to have the witness tell me what the differences were, in his own words, what the differences were between this General Electric refrigerator—— [171]

The Court: Oh, no; I am not going to let him do that. That is going a little too far.

Mr. Cunningham: Well, sir, I do not want to lead him, but I am trying to get to the point.

The Court: What was your last question that he asked you, whether the General Electric was a two-temperature box or a single-temperature box?

(Testimony of Donald F. McChesney.)

The Witness: I do not recall him asking me that. He asked me if it had had provision for moist cold and what provision it had, if any, for freezing. That is the way I remember the question.

The Court: All right; that is more accurate. Answer that question.

The Witness: Well, it had for freezing only the ice tray compartment or ice cube compartment up in the storage, food storage box. It had no room for storage of the frozen foods but simply a place to make ice cubes.

Q. (By Mr. Cunningham): Did it have a single evaporator coil?

A. Well, I am not a technical man. I don't know.

Q. Did you have to defrost the General Electric? A. I did regularly.

Q. For how long a time had you had this General Electric refrigerator in use prior to 1931?

A. I don't recall the exact time, but I would say about [172] approximately two years.

Q. Was it in a worn-out condition when you bought the Potter?

A. No, it was running perfectly, as well as it did when I bought it.

Q. What did you do with it?

A. Well, I ran some ads in the paper and sold it.

Q. Will you tell us the reasons why you replaced it with this Potter refrigerator?

The Court: Do not answer that question. That is enough on this line, Mr. Cunningham.

(Testimony of Donald F. McChesney.)

Q. (By Mr. Cunningham): Did this Potter refrigerator, Exhibit 11-A, stay in service in your family from 1931 to what date—1950, I believe it was?

A. Approximately 1950. I don't recall the exact date.

Q. Did it operate satisfactorily through those nineteen years?

A. Well, the compressor unit——

Q. Tell us what, if anything——

Mr. Byron: Wait a minute. Let him answer the question. You stopped him when he wanted to say something.

Mr. Cunningham: I am sorry; go ahead.

The Witness: The compressor unit that furnished the power for it had to be serviced occasionally.

Q. Were there any other troubles with the Potter during [173] the nineteen years, that you now recall?

A. Well, at one time we, through servicing it, someone who apparently did not understand the circuit put the wrong refrigerant in it, and I had to have a hydrator put in the line to take all the moistuer out—a dehydrator.

Q. That is a drier in the refrigerant line; is that what you mean?

A. Yes, to take moisture out of the refrigerant.

Q. You do not mean hydrator pans that were on the market? A. No, it is a dehydrator unit.

(Testimony of Donald F. McChesney.)

Q. Do you recall any other difficulties over the nineteen years?

A. Well, eventually the old pump wore out, and I got a new pump unit, complete unit.

Q. Is that a replacement compressor pump unit in the bottom part, bottom compartment of Exhibit 11? A. Yes, it is.

Q. When did you get that?

A. Well, I don't recall that date exactly either, but probably about 1940, somewhere along there.

Q. I understood you to say that you had some difficulty obtaining skilled service in connection with this Potter refrigerator? A. That is right.

Q. To what period of time do you refer? [174]

A. Well, that was in the early stages before other manufacturers started making similar kinds of boxes.

Q. Can you place the time as accurately for us as you can?

Mr. Ramsey: I object on the grounds of materiality, if the Court please.

The Court: Objection sustained. Mr. Cunningham, I am a man of great patience, but you are going far beyond the relevancy here, and I think—it does not make any real difference whether this was the most wonderful box that he ever had and worked perfectly or whether he had trouble. We are here trying to find out whether the Amana and Admiral infringed the claims of the reissue patent.

Mr. Cunningham: May I ask him this question, your Honor: Were there any other makes of refrig-

(Testimony of Donald F. McChesney.)

erators on the market during the early '30's that had this moist cold feature?

The Court: Obviously the question is improper. This man is a boat builder and not a refrigeration expert.

Mr. Cunningham: I was asking within his own knowledge.

The Court: Do not answer the question.

Q. (By Mr. Cunningham): Mr. McChesney, what time did you put this refrigerator out of service? A. Approximately 1950.

Q. What did you do, if anything, toward replacement of this refrigerator?

A. I replaced it—— [175]

Mr. Ramsey: Objected to, if the Court please: irrelevant.

The Court: Objection sustained.

Q. (By Mr. Cunningham): Did you buy an Admiral Dual-Temp?

The Court: I do not think that that is a proper question, Mr. Cunningham. The jury is instructed to disregard it.

Mr. Cunningham: Mr. McChesney, have you any interest in the plaintiff, Moist Cold Corporation, plaintiff in this action?

A. Well, indirectly, yes.

Q. Will you explain that interest, please?

A. Well, as I understand it, this Moist Cold Corporation is set up——

Mr. Byron: Excuse me; would you speak just

(Testimony of Donald F. McChesney.)

a little more loudly and distinctly. I cannot hear you.

The Witness: I say, as I understand it, this Moist Cold Refrigeration Company was set up to—owned the Potter patent, and I have since almost the inception of the patent been interested in it because I believe it had a real value because it represented a patent of a new type refrigerator.

The Court: Do you have any financial interest in this Moist Cold Company or any corporation that has stock in the Moist Cold?

The Witness: No, not in the Moist Cold Corporation.

The Court: What is your interest, then, any financial interest? [176]

The Witness: I have been through the past 24-odd years contributing to Mr. Potter's efforts to establish the validity of his patent. I have no stock, no legal claim for any money, and I have just been helping him to carry on the efforts to validate the patent in the belief that if he was successful he would do what he could to compensate me for the money I had put into it.

Mr. Cunningham: The witness is with you.

Mr. Ramsey: No cross-examination.

The Court: That is all.

(Witness excused.)

Mr. Cunningham: Mr. Bartlett, please. [177]

JESSE E. BARTLETT

a witness produced in behalf of Plaintiff, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Cunningham:

Q. Mr. Bartlett, will you please state your age, residence, and present occupation?

A. I am seventy-two years old.

Q. And your residence?

A. Grants Pass, Oregon.

Q. And your present occupation?

A. Well, retired.

Q. What has been your principal occupation, Mr. Bartlett in life?

A. Well, for a great many years I was salesman and sales manager. Since I have quit the refrigeration business in 1932 I purchased a mine in Southern Oregon and also a farm.

Q. Were you ever employed by the Potter Refrigerator Corporation in Portland, Oregon?

A. I was.

Q. At what time?

A. Well, I think I went to work for them in November in 1929.

Q. How long did your employment continue?

A. About two years. [178]

Q. Where was the place of business of Potter Refrigeration Corporation?

A. Well, it was on Ninth and Glisan.

Q. In Portland, Oregon? A. Portland.

(Testimony of Jesse E. Bartlett.)

Q. In what capacity were you employed?

A. Sales manager.

Q. For what territory?

A. Well, I think to start with we were primarily interested in only Portland, and later we extended it to take in all the outside territory of the State of Oregon, Idaho and Washington.

Q. Have you any recollection of experimental work being done while you were in the employ of Potter Refrigeration Corporation?

A. Yes, sir.

Q. On a refrigerator adapted to maintain different temperatures in different compartments?

A. I did; I observed this machine.

The Court: Mr. Cunningham, I know that you have been reading somebody else's question, but in this Court you do not ask leading questions, so just shorten the question.

Mr. Cunningham: All right, sir. Will you please tell us what that first recollection was? [179]

A. Well, naturally being interested in selling and sales talk, why, when I heard this new method being discussed I went to look at it upstairs and—and from time to time I could see it had many selling points if they could—could develop a box that had both a low and a moderate temperature. So being interested in it I looked at it a great many times over the first year that I was there.

Q. Was this a household refrigerator?

A. It was.

(Testimony of Jesse E. Bartlett.)

Q. And do I understand you to mean that it was two different temperatures in the same cabinet?

Mr. Byron: Well, now, your Honor, we want to object to that. We want to be kindly to the other side and fair and generous.

Mr. Cunningham: I will withdraw it, your Honor.

Mr. Byron: After all, there is a limit.

The Court: All right. He has withdrawn the question now.

Q. (By Mr. Cunningham): Can you describe it, what kind of a box it was?

A. It was rather a crude-looking box from the outside and it had a brine tank in the one compartment and a coil—my first recollection of it was just a copper tubing wrapped around a core.

Q. Can you place the time for us now, your first recollection, and will you please, when you first saw it? [180]

A. I suppose within the first month I was there or the second.

Q. That would be in 1929?

A. That's right.

Q. December or November?

A. I think so.

Q. Well, now, will you continue with your description, please?

A. I remember the compressor or the pump set on the side of it on the floor and the copper tubing run up to the box.

(Testimony of Jesse E. Bartlett.)

Q. What was the means of cooling the other compartment?

A. I don't just understand your question.

Q. What compartment have you just described as having the coils in it?

A. Well, the top part of the refrigerator, as I remember, was a low-temperature part and the larger box was in the bottom and the compressor was on the side.

Q. What cooling elements were in each of those compartments?

A. Well, I wouldn't know what you would call them.

Q. Well, as I understood your answer you say the low temeprature was in the top. Was that what you said? A. Yes; that's right.

Q. And that the higher temperature or the warmer was in the bottom?

A. That's my recollection of it.

Q. Will you notice Plaintiff's Exhibit 11-A. Does that [181] refresh your recollection?

A. It seems to me it was a different box from that at the time. It was a much smaller box to my memory.

Q. What type of box was that, Mr. Bartlett?

A. Oh, it was a wooden box.

Q. Was it just an old household refrigerator?

A. Yes; an old household refrigerator.

Mr. Byron: Just a minute. I object. It's leading again.

The Court: He has already answered that ques-

(Testimony of Jesse E. Bartlett.)

tion so you can answer it. Go ahead, Mr. Bartlett.

The Witness: Well, it was just a regular household type but a very dilapidated old icebox, from my recollection.

The Court: I can't hear you.

The Witness: I would be a very old type of icebox.

The Court: All right. Mrs. Connell, can you hear the witness?

(Whereupon, the juror shook her head.)

The Court: Now, that's what I was suspecting, Mr. Bartlett.

The Witness: I'm sorry.

The Court: Not only are the attorneys finding it difficult to hear you, but the jurors can't hear you.

The Witness: I will turn around.

The Court: You will have to speak up.

Mr. Cunningham, I want to make a suggestion to you. Why don't you go back there in back of Mr. Ramsey and sit down, [182] and then if you hear Mr. Bartlett you will know that the jury is hearing him.

Q. (By Mr. Cunningham): Now, did you see any tests——

The Court: Now, I just wanted to say one other thing, Mr. Cunningham. In our Court you don't stand right by the jury, you don't put your hand on the rail; you stay away from that jury.

Q. (By Mr. Cunningham): Did you see any

(Testimony of Jesse E. Bartlett.)

tests being performed on this experimental refrigerator?

A. Just how do you mean that? What kind of tests?

Q. Well, if you say you saw some I will ask you what kind. Did you see any?

A. Well, there were thermometers in both compartments and a chart on the wall that the temperatures were being tabulated on. Is that what you——

Q. Yes. What were those charts? Did you ever notice any of them?

A. Yes, I noticed them frequently.

Q. Were you able to understand the purpose of them? A. Oh, I think so.

Q. What did they show, these charts?

A. Well, the thermometers in the high temperature usually run around 40 degrees and in the low temperature right around zero.

Q. Did these charts give you any information with respect [183] to the maintenance of those respective temperatures?

A. I don't know just how often they were taken, personally. I didn't take them. I didn't—probably over once a day or probably once every two or three days, but the calculation was on the wall on the chart.

Mr. Byron: I object, not competent.

The Court: Well, the witness has already testified.

Q. (By Mr. Cunningham): Who did conduct

(Testimony of Jesse E. Bartlett.)

these tests in the Potter Refrigerator Corporation?

A. Oh, I think Mr. Bronaugh.

Q. And who was Mr. Bronaugh?

A. He was the president of the Potter Refrigerator Corporation.

Q. Had you had any prior experience in refrigeration—— A. Yes, I had.

Q. ——before you went with Potter? Will you please tell us briefly what that was?

A. Well, I had worked the first for Frigidaire here in Portland, Mr. E. McClurg, distributor.

Q. When was that?

Mr. Byron: I question the materiality of this line of conversation, your Honor, and I object.

Mr. Cunningham: The purpose is, your Honor, to show that he would at least understand the workings of a refrigerator from his prior experience.

The Court: You were a salesman for Frigidaire, is that [184] right?

The Witness: That's right.

Q. (By Mr. Cunningham): Any other company?

A. Later, Copeland Refrigerator Corporation.

Q. Can you give us some idea of the dates of these employments?

A. Well, I was just trying to think. I think I worked for Mr. McClurg probably in '24 or '25, and then I went to Seattle. I don't know how long—I must have worked for Mr. McClurg about a year, possibly longer. Pretty hard to remember. This is

(Testimony of Jesse E. Bartlett.)

going back a long time. That's pretty near the $64,000 question.

Q. Now, Mr. McClurg was the Frigidaire——

A. Distirbutor.

Q. ——distributor? A. In Portland.

Q. I beg your pardon? A. In Portland.

Q. In Portland. Now, when was your work with the Copeland Refrigerator people?

A. That was—I went immediately from Portland to Seattle with the Harper-Magee Company which were distributors for Copeland.

Q. Did you, in the course of this employment, become familiar with the product that you sold, Frigidaire and Copeland?

A. I naturally had to. [185]

Q. Were you also familiar with your competition at that time and household refrigerators?

A. Certainly.

Q. These were both household refrigerators you sold, were they not? A. Certainly, yes.

Q. Will you describe, please, the general types of household refrigerators that were available prior to your employment by Potter?

The Court: Objection sustained.

Q. (By Mr. Cunningham): Will you describe, please, the ones you sold, Frigidaire and the Copeland?

The Court: Objection sustained.

Q. (By Mr. Cunningham): Did they provide a moist cold storage for fresh foods?

Mr. Byron: Same objection; not material.

(Testimony of Jesse E. Bartlett.)

The Court: I am going to let him answer that one.

The other boxes, Frigidaire and Copeland, provide for moist cold in their boxes?

The Witness: No, they did not.

Q. (By Mr. Cunningham): Did they have provision for the storage of frozen foods over sustained periods of time? A. They did not.

Q. Did they require periodical defrosting?

A. Yes, they did. [186]

Q. Is that true of both the Frigidaire and the Copeland? A. That's right.

Q. Well, now, how long did this experimental work at the Potter Refrigeration Company continue, as far as you know, on these converted ice-boxes?

A. Oh, I think nearly all of the two years that I was there.

Q. Was it all on this same first cabinet, or were there other cabinets?

A. Oh, there were other cabinets.

Q. Will you tell us what your recollection is as to the succession of cabinets?

A. Well, I don't remember all of the cabinets that were being operated.

Q. We understand that, Mr. Bartlett. We merely want what you do remember in your own words.

A. Later they had a cabinet downstairs that was much better equipped than the one upstairs, and that set just back of a partition from the salesroom.

Q. Did that have a compressor condenser unit inside or outside of the cabinet, if you recall?

(Testimony of Jesse E. Bartlett.)

A. The compressor unit was—the pump was in the bottom, inside-contained.

Q. Did that refrigerator resemble anything that is in the courtroom, and I direct your attention to the one with the doors open? [187]

A. That is the refrigerator that was downstairs.

Q. You recognize that as the one that was downstairs? A. That's right.

Q. Do you remember whether there were any tests conducted on that refrigerator downstairs?

A. Well, I think they had thermometers in it all the time.

Q. Did you observe the thermometers or any records of the thermometers?

A. Yes; occasionally.

Q. What sort of results did you observe as to the temperatures maintained in the box?

A. Well, the temperatures were about the same as upstairs. In other words, they held very close to 40 degrees in the food compartment, and about zero in the freezing compartment.

Q. Do you know whether any tests were then made with food, fresh and frozen?

A. Yes. They had some food from Swift & Company in the freezing compartment.

Q. And did you observe the results with respect to the preservation and storage of this food?

A. Well, it was—always from all the handling I ever did of it—was always froze hard.

Q. Do you recall any tests with fresh foods?

A. No, I don't.

(Testimony of Jesse E. Bartlett.)

Q. Well, now, do you know whether at a later time and during [188] your employment the Potter Refrigerator Corporation began work on a commercially salable household refrigerator?

A. I don't remember too much about their household that they were to put on the market. I think that they had a box built up that was a more finished job than this one.

Q. Did you see it?

A. Well, yes, I passed by it many days. Explain it—that would be pretty hard to do in this late day. I have seen a good many refrigerators in the meantime.

Q. Mr. Bartlett, I don't want you to strain your recollection because that is always dangerous and you may make a mistake. But just give us what you now recall. Can you recall any other experimental boxes than this first one that you saw? [189]

A. I think I would rather not say any more than these first two.

Q. All right, sir. Did you have an opportunity to observe these—either of these first two boxes with respect to whether or not frost accumulated in the warmer compartment?

A. After they put in a fin-type coil, then I don't think that they had any ice form on that coil. That is just my memory of it.

Q. By the way, can you give us the month or give us as accurately as you can the time when you first saw the fin-type coil in that refrigerator?

A. They held a convention about a year after I

(Testimony of Jesse E. Bartlett.)

was there. I believe it was in January or February, and at that time they had these fin-type coils. I think it was something over a year after I went there.

Q. I think, Mr. Bartlett, we have a listed exhibit here which we should be able to find. It was identified as 3-OO, and our trouble is in finding it.

The Court: You can call him back this afternoon, and during the recess you can look for it.

Mr. Cunningham: All right, your Honor.

Q. Are you sure that the date is 1930 or 19— well, strike that. That is all.

Mr. Ramsey: No cross-examination.

The Court: That is all, Mr. Bartlett.

(Witness excused.) [190]

Mr. Cunningham: If your Honor please, I would like to begin the reading of the Potter deposition.

(Discussion off the record.)

Mr. Cunningham: Is Mr. Bartlett gone? We have found the exhibit.

The Court: Call him back.

JESSE E. BARTLETT

a witness in behalf of the Plaintiff, was recalled for further examination, and testified as follows:

Further Direct Examination

By Mr. Cunningham:

Q. Just one more question. I show you Plaintiff's Exhibit 3-OO.

The Court: For identification.

Q. (By Mr. Cunningham): Does that bring back any memories?

A. I was at that convention.

Q. Are you in the photograph?

A. I think so.

Q. Do you recognize yourself?

A. That is right.

Q. That means you were present when the picture was taken? A. That is right.

The Court: I assume it does. When was that? [191]

The Witness: It says January 17-18, 1938.

Q. (By Mr. Cunningham): Is that the convention to which you referred?

A. That is the one.

Q. In your recent answer? A. Yes.

Mr. Cunningham: That is all.

Mr. Ramsey: No cross-examination.

Mr. Cunningham: I offer the photograph in evidence.

Mr. Ramsey: We repeat our objection, your Honor.

The Court: Objection sustained.

(Witness excused.)

Mr. Cunningham: I should like to start the reading of the Potter deposition, your Honor.

The Court: Mr. Lucas will ask the questions, and, Mr. Cunningham, are you going to ask questions?

Mr. Cunningham: Yes, your Honor, if I may.

The Court: Very well.

Mr. Cunningham: I will also have for your Honor's use, I am happy to say, an extra copy of it.

The Court: Have all matters in controversy been determined prior to the time that this deposition is being read?

Mr. Byron: Yes. [192]

(Discussion off the record.)

The Court: The question I was asking is, have you and Mr. Cunningham—have I previously passed upon all controversial matters?

Mr. Cunningham: Yes, your Honor.

Mr. Byron: Yes, that is correct with respect to this deposition.

The Court: Start at the top of page 132.

Mr. Cunningham: I was trying to put in the date of the deposition. Do you think that is important?

The Court: The date of the deposition?

Mr. Cunningham: Yes.

The Court: It was on October 17, 1955.

Mr. Cunningham: No, your Honor, it was at 2:40 on October 25, 1955, pursuant to notice served October 17th, and it continued on the 26th.

(Thereupon, the reading of the deposition of Thomas Irving Potter proceeded with Mr. Cunningham reading the questions and the Court Crier reading the answers as follows:) [193]

DEPOSITION OF THOMAS IRVING POTTER

"Q. Will you please state your name and residence, Mr. Potter?

A. Thomas Irving Potter. My residence is 5 Tudor City Place, New York 17, New York."

Mr. Byron. Just before you go on, I think it should be noted that this deposition was taken in New York City at Mr. Potter's residence.

The Court: Very well.

(Thereupon, the reading of the deposition continued as follows.)

"Q. Are you the Thomas I. Potter named as one of the patentees in the United States Patent No. 2,056,165? A. I am.

Q. And in its reissue No. 23508? A. I am.

Q. Are you an officer or an employee or agent of the plaintiffs' Moist Cold Company?

A. I am.

Q. Have you any proprietary interest in the plaintiff, Moist Cold Corporation?

A. I don't understand what you mean by 'proprietary.'

Q. Are you a stockholder?

A. No, except I may probably own one share of stock. That is at its discretion of the trustees to hold the majority of the stock.

Q. Have you, Mr. Potter, at your own instigation and also [194] at my request consulted whatever record you have available in an effort to straighten out the chronology of the invention by the patents I have mentioned?

(Deposition of Thomas Irving Potter.)

A. Do you mean the chronology—do you mean a timetable?

Mr. Cunningham: The question was merely, have you consulted your record, and thought about it for the preparation of this deposition?

The Witness: Yes, sir.

Q. In connection with that work, have you prepared any notes to help refresh our recollection?

A. I have them before me.

Q. Is this document that I hand Mr. Byron a carbon copy of those notes?

A. That is a carbon copy of what I have before me, sir.

Q. Mr. Potter, would you tell us just briefly and very generally what your first activities were in connection with the refrigeration of any sort, household or commercial?

A. My first activity in connection with refrigeration dates back to, I would say, 1920, or thereabouts, and that is when I was with the Federated Engineers Development Corporation, and we did experimental work on refrigerators at that time. My first activities that led to the development of the patent that is now in controversy started in June of 1925. At that time I left the East."

(Discussion off the record.) [195]

"A. (Continuing): I went to Portland and made my headquarters there. In the late summer of June, 1925, I went to the beach in Oregon called Gearhart and at that time I spent several weeks

(Deposition of Thomas Irving Potter.)

working on the designs of a compressor to be used in refrigeration equipment. When I finished the design, I returned to Portland and made arrangements with the Fouch Electric Company, on what I believe at that time was North Ninth Street in Portland, Oregon. I made arrangements whereby they gave me space in their shop and supplied workmen as I needed them. I carried on that work from an experimental standpoint until I had a very practical compressor equipment designed.

On the 10th of November, 1926, I applied for my first patent on this compressor or pump, if you want to call it such.

Q. Now, that brings us to 1926. What did you do throughout the balance of that year?

A. In 1926 I continued the experimental work, seeking to improve the pump, both from a functional standpoint and from a production standpoint. That experimental work continued over a long period of time.

Q. By a long period, do you go into 1927 with that experimental work?

A. Yes, I go into 1927.

Q. Did you have a practice of trying out these refrigerator [196] pumps or compressors during that period of time?

A. We tried those out in the shop, tested them as best we could there.

Q. Stop me if I am going too fast, but when was the first time you put them in practice, experi-

(Deposition of Thomas Irving Potter.)

mentally or in experimental use in the homes of the people, if you did so?

A. Mr. Cunningham, I have before me this chart here, if I can call it that, or this calendar, and before that I have—before we have asked, I have a note, that on the 5th day of July, 1927, the Potter Pump Patent was issued, Patent No. 1,635,058.

Mr. Ramsey: May the record show that Mr. Potter is sitting at his desk and reading from a memorandum, and referring to the notes and the dates thereon?

Mr. Cunningham: A copy of which Mr. Ramsey has in his hand.

Mr. Ramsey: That is correct.

The Witness: Shall I continue, sir, to answer your question?

Mr. Cunningham: Yes, if you will continue your chronological statement.

A. (Continued): Shortly after the issuance of that patent we started what we called, for want of a better name, the Potter Syndicate.

Q. Would you explain that a little? [197]

A. I had carried all of the expense of the development work of this pump up to that time out of my personal pocket. My funds were running low and I needed added capital to carry on the work and bring it up to a commercial point, so I sold some undivided interest in the pump patent to different people, and in doing that I gathered a group of men who had bought an interest in this patent.

(Deposition of Thomas Irving Potter.)

It was that group that we, for want of a better name, called the Syndicate.

Q. Called 'Potter Syndicate,' wasn't it?

A. Called the Potter Syndicate, I believe. Now that provided me with the added capital necessary to continue the development work. As part of my arrangement with each person who came into that setup and bought an interest in the patent I insisted that included in the deal was the right to put one of my machines into use in their kitchen for the personal use in their housekeeping. This gave me an experimental laboratory, if I could call it that, for use in the homes, and that first started in the late summer or the early fall of 1927.

We considered that as part of our laboratory checks and gave us a picture of the attitude of people who used them in their homes. [198]

Q. And did you check with these people and get reports on the use of your compressors?

A. We kept in close touch with them.

Q. By these people, do you also mean the wives of these people who were active in the kitchens?

A. On that end, it was largely through the wives, because the men came into my deal and put the money into it and it was the women who used the equipment and we tried to keep in touch with them as to whether they found it satisfactory, whether they had any complaints. So our contact on that end was largely with the women.

Q. Did you learn anything as a result of these contacts with respect to the adequacies or inade-

(Deposition of Thomas Irving Potter.)

quacies of your equipment and of household refrigerators in general?

A. Yes, we learned a great deal.

Q. Was there anything that had any bearing on your subsequent activities in household refrigeration?

A. A great deal depended on that. At that time—that was in the early days of the commercialization of household refrigeration. The only two refrigerators that were on the market at that time in a national way were Kelvinator and Frigidaire to the best of my memory. We were very proud of our equipment because we were freezing faster than either Frigidaire or Kelvinator. We had a self-defrosting cycle so the machine never had to be shut down for defrosting. Then [199] we were startled to find that some of our women users were complaining about our equipment, stating that it dried the food out and that it didn't freeze fast enough.

Q. Was that a complaint that caused you any concern?

A. At first, I thought that the women were just merely ignorant and didn't know what to expect, because every one of these women—none of them, if I can correct myself—that I knew of, had had electric refrigerating at the time we put our equipment in.

Q. By the way, what was that equipment, generally, Mr. Potter?"

The Court: "I think before you finish——

(Deposition of Thomas Irving Potter.)

Mr. Cunningham: Actually we crossed that out. Perhaps——

The Court: It's a little after eleven o'clock now, and in accordance with our usual procedure I think this is a good time to take a short recess.

(Whereupon, the jury was excused.)

The Court: Mr. Duyck, do you want to remain here a minute and read two pages of this deposition so you will get the beginning of this deposition?

(Whereupon, the juror, Mr. Duyck, was afforded a copy of the transcript for the purpose of reading the two pages mentioned by the Court.)

(Recess.)

The Court: What page are you on? [200]

The Bailiff: Page 138.

Mr. Cunningham: "Mr. Cunningham: Yes.

A. I think I would keep it—I think it would keep it simpler."

The Court: Wait a minute.

Mr. Cunningham: 138, your Honor.

The Court: Go back to 137 to the last question on there and we will get better continuity on it.

Mr. Cunningham: And skip the colloquy, I think.

The Court: Yes.

Mr. Cunningham: "Q. Was that a complaint that caused you any concern?

(Deposition of Thomas Irving Potter.)

A. At first, I thought that the women were just merely ignorant and didn't know what to expect, because every one of these women—none of them, if I can correct myself—that I knew of, had had electric refrigerating at the time we put our equipment in.

Q. By the way, what was that equipment, generally, Mr. Potter?

The Witness: Before I answer that, can I finish what I started to say?

Mr. Cunningham: Yes.

A. I think I would keep it—I think it would keep it simpler. Every one of these people had iceboxes—and we equipped the icebox which they then owned with an evaporator which in effect was an artificial cake of ice, and we connected [201] that to our condensing equipment, which consisted of what we called the Potter pump, a motor to drive it, and a condenser. That was connected to the evaporator in the icebox and gave them refrigeration. Sometimes that machine was connected, and set up beside the icebox. In most cases, it was—the machine was put in the basement and the connection was made through tubing to their icebox, which was either in the kitchen, their pantry or on the back porch.

Q. Now, if you will cast your mind back to this problem, the ladies of Portland and environs that presented you with: Did you make any early attempts at a solution to that problem—tell us in your own words what you did?

(Deposition of Thomas Irving Potter.)

A. Well, in the first place, when we began to get these complaints we considered it was based on ignorance on the part of the women. They would have to be educated with what they would expect from household refrigerators, and I will confess it made very slight impression on us at the beginning. We had gradually, during that time—we began to sell our equipment to other people who were not in our Syndicate and we began to sell our equipment to stores and commercial users.

In the fall of 1928 Mr. L. J. Bronaugh came to work for me and took charge of the commercial operations.

Q. May I interrupt a minute? Is that the Mr. L. J. Bronaugh co-patentee on the two patents mentioned?

A. That is the same Bronaugh. That was in the fall of 1928. [202] At that time we had an office in the Public Service Building in Portland, and that office contained a showroom where we showed our equipment. Mr. Bronaugh had never had refrigeration experience up to the time that he came to work for me, as I understand it. He showed a very quick grasp of the subject, and in a short time we had placed him in charge of that side of the business.

Mr. Ramsey: May I interrupt? What side of the business are you referring to?

The Witness: The commercial and the shop. That included—he was in charge of the shop, the

(Deposition of Thomas Irving Potter.)

production end, all that went on in the shop. At the same time he was in charge of our commercial sales.

Q. Had he started with you originally as a salesman?

A. He started first as a salesman, and he was a very intelligent person and a very intelligent personable chap, but he was not successful as an individual personal salesman. But he had so much intelligence that I felt that many men are not good salesmen, but they are certainly strong on other points. Because, I felt that I brought him into this managerial position, and I was not wrong. He showed full capacity for that .

Q. Can you date that, please, Mr. Potter—the date of Mr. Bronaugh s change from sales to management?

A. That was in the late summer or the early fall of 1928. [203]

Q. I notice on your notes here a reference to a Cheatham wire of October 20, 1955. What is the significance of that reference?

A. I wanted to check my own memory as to the dates I had been given. Mr. Cheatham is the attorney in Portland. I believe he is your associate, and I wired him to please get in touch with Mr. Bronaugh, and ascertain three things. When Mr. Bronaugh became manager for me, also when we went into the second floor of our shop at Ninth and Flanders, and also to check there with him as a

(Deposition of Thomas Irving Potter.)

guide to my memory when we took over the entire building, including the first floor. And Mr. Cheatham's wire, after talking with Mr. Bronaugh, confirmed my memory of these dates. That is why I have that reference.

Q. With those physical moves in mind, which took place in the beginning of the late summer or early fall of 1928, what did you and Mr. Bronaugh do with respect to this complaint of the ladies in Portland and vicinity?

A. That didn't happen immediately with us. As I said before, we discounted the complaints. We became active on the pushing of the sales on our equipment for iceboxes and commercial and that continued until February 23, 1929. We organized the Potter Refrigerator Corporation.

Q. By the way, I think you'd better go back a minute there. I have on the copy of your notes a reference to May 24, 1928— [204] 'Potter Refrigerator Sales Company organized.'

A. That was on May 24, 1928.

Q. Was that a predecessor of Potter Refrigerator Corporation, or what was it?

A. Up to that time, all my business was done in my personal name, and I ran into certain slight difficulties, which at the time I thought were peculiar. We were in the Far West. We could order refrigeration supplies from the East from the different suppliers, and I would order them on my personal letterhead. Immediately the order would

(Deposition of Thomas Irving Potter.)

be held up until they immediately would write for references and so forth.

Q. This is 1928, now, or earlier?

A. Away back in 1928 and before, whenever we wanted supplies.

Q. Thank you.

A. (Continued): So I found the difficulty of doing business just as an individual. So, we organized a company which we called the—I have got it here—the 'Potter Refrigerator Sales Company.' I owned all the stock in that company, but it made it far easier for us to do business. And also in selling our own individual equipment, people were hesitant about buying equipment from just an individual; by doing business through a company, that removed that mental hazard and that was the purpose of that company.

Q. What was the relationship, if any, between the Potter Refrigerator Sales Company and the Potter Refrigerator Corp.? [205]

A. The Potter Refrigerator Corp. was organized, Mr. Bronaugh became its first president, and then we dissolved the Potter Refrigerator Sales Company, I believe, and this is only my hazy remembrance——

Q. By this, you are referring to your notes?

A. Yes, but you asked me about the relationship between Potter Sales Company and the Refrigeration Corp.

Mr. Cunningham: Yes.

A. (Continued): The Sales Company in it's

(Deposition of Thomas Irving Potter.)

name was restricted to sales. The Potter Refrigerator Corp. was all-embracing, which would cover manufacture and sales. So that was consolidating all of that in that Corporation.

By that time, Mr. Bronaugh in my estimation had proven himself, and we had confidence in putting him in there as its president.

Q. Now I note this on your note under date of February 23, 1929, for the date of incorporation of Potter in the Refrigerator Corp.——

A. Yes, of Oregon.

Q. And then another note right below, March 18, 1929, for the date of dissolution of the Potter Refrigerator Sales?

A. That is what I thought I had covered.

Q. Those are the dates, are they?

A. Yes, sir; those are *the dates*.

Q. Now will you tell us in a little more detail where were [206] your offices in February up until April of 1929?

A. Our offices were in the Pubnic Service Building in Portland, Oregon.

Q. That is whose offices—what individuals?

A. I had my own personal private office there. We had a large display room, a showroom, if you want to call it that, and there was an additional office on the other side of that which Mr. Bronaugh occupied.

Q. Did you have any plant facilities at that time prior to April?

A. Yes, we had facilities through the Fonch Elec-

(Deposition of Thomas Irving Potter.)

tric. When I first started with Fouch, we started with a small corner in his shop. At that time he had a one-story shop. As we needed more and more room, Mr. Fouch put a second floor under his building, and we rented the entire second floor of his building. He did the machine work on his floor under—we paid him on an hourly basis for the men that he employed.

Q. Can you give us a date when you moved to the second floor?

A. The second floor we used for assembling, testing, and so forth. Now I do not have in my notes any confirmation of the date that we moved to the second floor of the Fouch Building.

Q. Well, I may have misunderstood your notes. What is that opposite April, 1929? Is that a confirmation from Mr. Cheatham?

A. That—we have been in the second floor on the Fouch [207] Building a very long time. By that time we were active in selling our equipment to the public. We needed more room and we found that the second floor of the building adjacent to the Fouch Building could be rented. We rented that and cut an opening between the second floor of the Fouch Company into the second floor of the adjoining building, and that gave us added room.

Q. Can you identify that building?

A. That was the building at the corner of Ninth and Flanders. I have here a photograph of that building, taken in the fall of 19—1929—when we occupied the entire building.

(Deposition of Thomas Irving Potter.)

Q. What do you mean by the entire building on this photograph—the corner building?

A. Yes. This picture shows at the right a two-story building. That was the Fouch Electric. When I first began using Mr. Fouch's facilities, we had a small part of the lower floor. At that time there was only one story to that building.

Q. Referring to the white building at the right?

A. Yes. Then he built the second floor and leased us that entire second floor. Then from this picture—I spoke of our leasing the second floor of the building adjoining Fouch's—that is this corner building shown in the photograph——

(Counsel hands Exhibit to Counsel for Defendants.)

Mr. Cunningham: I ask that that be marked for identification as Potter's Exhibit 1." [208]

Mr. Cunningham: I now offer it in evidence, your Honor.

The Court: Is there any objection to it?

Mr. Ramsey: No objection.

The Court: It may be admitted.

(A photograph, having been previously marked for identification, was received in evidence as Potter's Exhibit 1.)

Mr. Cunningham: "Q. Did you do any experimental work after this move to the second floor of the building at the Ninth and Flanders corner, and if so what?

(Deposition of Thomas Irving Potter.)

A. Before we moved into that building on the second floor Mr. Bronaugh and I had numerous discussions as to the complaints of slow freezing as they called it. We thought it was fast freezing, and the drying out of food. They began to get deeper and deeper into our consciousness as time went on. And in the spring of 1929, before we moved into this second floor of the corner building, we were seriously trying to find the mental answers at least to that problem, and during that time—I cannot say the day or the hour or the month—but it was during the time prior to our going into that second floor of the corner building that we got the first concept of what we hoped could prove an answer to these complaints.

Q. By 'we' do you mean yourself? [209]

A. I mean Mr. Bronaugh and myself. My mind works in my memory by association. I know that coincident with our moving into that second floor—that is why I asked Mr. Cheatham to confirm the time, because coincident with our going into that second floor of the corner building is when we started to experiment along the ideas that we had conceived during the spring of that year.

Q. And what were those ideas that you conceived earlier that year?

A. The problem at that time that was causing complaints was what they called slow freezing and what they called drying out of the food. Like everybody else in the business at that time, we thought that those could not be eliminated, because al. re-

(Deposition of Thomas Irving Potter.)

frigerator boxes were functioning just the same as iceboxes except they had artificial cakes of ice. It was easy to give them better humidity conditions. All you had to do was to set the temperature of the chilling unit warmer. If you set that warmer, then you lost your freezing ability. It was easier to give them fast freezing, because all you had to do was set the temperature of the chilling unit colder, but in so doing that we dried the air out more. Our first flash that came to us as a possible solution was that if we would divide the box into two compartments and separate those functions then we could make it as cold as they wanted it and give them faster freezing. [210]

Q. In one compartment?

A. Yes and run the chilling unit in the other compartment at a warmer temperature and thereby give them high humidity or moist cold.

Q. Did you have any mental concept of means of that date prior to April, 1929?

A. Once we got the concept, the means just sort of naturally flowed. We had used in commercial refrigeration—it was old—we had used show cases, and we had used finned coils, so that was our common knowledge. We had built and sold ice cream cabinets and that was common knowledge. Our job was to take these things that were of common knowledge to use and try to get a balanced construction that would give us the results we wanted, and that would be within commercial limits. [211]

Q. Did you have, as you now recall, precise men-

(Deposition of Thomas Irving Potter.)

tal concepts prior to April of the constructions that would get that result?"

Mr. Cunningham: We are skipping now, sir, to Page 149, the question.

The Court: Are you going to rephrase the question?

Mr. Cunningham: I will read what is on 149.

"Q. Confining your answer now to a period prior to April, 1929, what physical embodiment did you do—you recall that you conceived—you and Mr. Bronaugh—conceived with respect to this problem that you have been discussing?"

Mr. Cunningham: Another question:

"Q. Mr. Potter, before making any notes, such as those in front of you, did you have a present and unrefreshed recollection as to the salient points covered in those notes?

A. I can best answer that by saying that I first made out what I might call a calendar on a sheet of paper starting with 1925, and going through month by month. Without any data in front of me I tried to fill that calendar out to the best of my ability from my strict memory, as I had it at the time. When I had that, then I took that and tried to find spots of confirmation to refresh my memory.

Q. Where did you try to find confirmation?

A. Wherever I could find it, in my records and——

Q. For an example, what records? [212]

A. Correspondence, largely. Some of the Court records that came in later."

(Deposition of Thomas Irving Potter.)

Mr. Cunningham: Will you skip the first sentence of that?

The Crier: "A. I have already spoken about wiring Mr. Cheatham for confirmation of my memory, and to me the interesting thing, and I think it is fair to put it out—the basis of this entire calendar, if I can call it that, is my present memory before I got these confirmations, and then whenever I found a spot that would give a confirmation to that I made a note of that on this calendar.

Q. Do you have any recollection of any significant alteration in your memory for dates that resulted from these efforts that confirm that memory?

A. No, sir, I do not."

Mr. Cunningham: Skipping now, sir, to Page 152:

"Q. As nearly as you can recall, and without reference to any notes—and there is no note on here that can help you, as I see it—can you recall what physical means you conceived prior to April, 1929—by 'you,' I mean you and Mr. Bronaugh—which was an answer in whole or in part to the problem that was posed to you by the ladies of Portland?

A. I do not believe we reduced anything physically until——

Q. That was not my question. Do you have any mental concept [213] of physical means? I didn't ask you if you produced anything. Did you have any mental concept——

A. Yes, a mental concept of the general direction.

(Deposition of Thomas Irving Potter.)

Q. Was that prior to April, 1929?

A. I relate my memory there to the time that we went to the upper floor of the shop and that was in the spring of 1929, and up to that time we had discussed it—we had made rough penciled sketches, and we had a definite concept, yes.

Q. Now, what do you recall, independently of any notes, that rough concept was other than what you have already testified to?

A. I have forgotten what I already testified to, but that concept was to divide the functions into parts, to separate them into two compartments.

Q. What means were you going to—by what means were you going to do that?

A. We were going to use a finned coil in the upper compartment of—the upper compartment operating above 32, above the freezing point. That would give us the answer of the drying out of the food. In the other compartment we were going to run that at what in those days we used to call a sharp freezer. Today I think we call it frozen storage.

Q. Did you have in mind operating both of these coils as you call them of a single compressor unit?

A. Absolutely. [214]

Q. What else did you have in mind, Mr. Potter, prior to April, 1929?

A. Our mental concept was to build a household refrigerator that would satisfy women in their kitchens, to operate it with a Potter machine.

(Deposition of Thomas Irving Potter.)

Q. What idea of physical means did you have in mind?

A. A concept of a Potter machine.

Q. What was that machine?

A. Compressor equipment that we were using and selling commercially.

Q. Anything else besides a compressor?

A. Then we had a chilling unit or freezing unit and a finned coil, in each—each one in a separate compartment.

Q. Anything else besides chilling and freezing units and the compressor?

A. Yes, we had a thermostat in there.

Q. Now, where were these elements to be placed?

A. Our concept when the whole thing was finished was to have a single unit which would make a household refrigerator, that would be sold complete as a unit.

Q. Each one of these three or four elements were to be in a single housing, is that what you mean? A. That is correct.

Q. Had you any concept with respect to insulation at that time? [215]

A. Just the normal concept at that time of an insulation or an insulated box which is your normal concept.

Q. What do you mean by 'normal concept'?

A. When you are active in a business certain things become second nature to you.

Q. Yes, but I want to know what you mean by 'normal concept'?

A. An insulated cabinet such as was being sold

(Deposition of Thomas Irving Potter.)

generally, with a dividing wall between the two compartments and that was to be insulated, keeping one from the other.

Q. Now, Mr. Potter, did you proceed to build anything, and, if so, tell me when——

A. Without referring to my notes, because they seem to bother this gentleman over here, we moved into the upper floor of the corner building, in the spring of 1929. Now, we had discussed this problem. This I know, because my association of ideas—I know it because of my association of ideas—we discussed this problem before we made that move. It was all just sketches between us or mental discussion between us.

Our first effort to put this to use in the trial was coincident with our moving into the second floor of the corner building and immediately after we moved in there is when we started making models.

Q. How many models did you make? [216]

A. I cannot state that with exactitude.

Q. What is your present recollection?

A. My present recollection is the first one we made was taking an icebox, either that or one of the General Electric cabinets which we purchased—but that wasn't equivalent to an icebox. We divided that vertically between the two sides. We put a slab of insulation vertically down through the center——

Q. Of the food compartment, do you mean?

A. Yes, of the food compartment.

Mr. Cunningham: Go ahead.

(Deposition of Thomas Irving Potter.)

A. (Continued): And on one side we put one of our cooling units which we at that time—which at that time were standardized. That was a casting, a coil—a casting with a coil wrapped around the outside, a hollow casting. And inside we placed the ice trays. That was in production with us. We didn't have to make it. We made those from a production standpoint in it, one, two or three sections, according to the size of the refrigerator that we wanted.

Q. That is, the trays?

A. No, we had units—cooling units—freezing units, if you want to call them that, chilling units, if you want to call it that. But we had a standard form which could be used either singly, doubly or in triple. We took one of those and put it on one side of this converted icebox. We [217] put a finned coil on the other side. We connected the two. We brought our circuit from the receiver in the machine compartment to that freezing unit through the coils of that, and we exhausted from that into the finned coil in the other sections. From there we returned that to the compressor.

Q. That was the complete circuit, was it not?

A. We had a thermostat which I remember very well. If I remember—I think I remember the name—it was some 'Air' something—That was a small round housing about the size of an alarm clock. In that there was a bimetal coil that looked like a spring. Connected to that spring or the bimetal it was a glass tube containing mercury and the contacts for the switch. There was a lever controlling

(Deposition of Thomas Irving Potter.)

the relative position of that bimetal unit. That came through to the outside. By changing the position of that lever you would change the point at which the machine would turn on, and off, and thereby control the temperature of the chamber in which that unit was placed.

Q. Now, is this the first unit that you recall, experimental unit?

A. Yes, that was the first one that was built on the second floor on the Ninth and Flanders building.

Q. Do you remember or recall any other experimental unit that you built at that time? [218]

A. I recall two others. One followed the other.

Q. Describe the first one.

A. I have just described the first one.

Q. How about the second one?

A. The second one was roughly the same as the one I first described. Now here I cannot be exact. I know that we built the second one. I don't know the changes that we made between that one and the first. We must have made some changes to cause us to build that second one. There were modifications in that. I am frank to confess, and I don't remember what they were.

Q. Can you go on to the third?

A. The third I can remember distinctly because the first two had a vertical division. The third one I remember distinctly, because that was the first time we had used a horizontal division, and that horizontal division divided the compartments, the

(Deposition of Thomas Irving Potter.)

principal of two compartments divided in another way. We used the lower section of that as the cold section, its freezing section. Then we had the finned coil in the upper section with our thermostat.

Q. Where was your compressor?

A. The compressor on all of those models was set up separate from the box, and usually set beside it.

Q. Beside the box?

A. Yes, beside the box. [219]

Q. Now were these just old-fashioned iceboxes or were they anything else? What were the boxes that you also used?

The Witness: Can I explain that?

Mr. Cunningham: Yes, I wish you would.

A. (Continued): During a previous period to what I am speaking about, the General Electric Company had announced their electric refrigerator with their Monitor top, and they had Portland distributor. I was told that the first machines that went out had deficiencies in them, and that the factory called all of these machines back for construction by the factory. I suppose you legal people will say that is hearsay.

Q. Tell us what the cabinets were.

A. The distributor had a large number of cabinets left on hand. He sold them at anything he could get for them and we bought, if I remember correctly—I can't be exact—but I thought we bought 15 or 20—we bought 15 or 20 of those cabinets with the unit removed and it left a square hole in the

(Deposition of Thomas Irving Potter.)

op. We took those cabinets; we filled in that hole with insulation and put metal plates on either side of it, and then we had a cabinet which we could use. I go into this for this reason. At that time we had a number of these cabinets on hand. We also had some iceboxes on hand, and here I will confess to a deficiency in my memory, if I can put it that way. I don't know, and I can't swear whether we used the [229] General Electric cabinets or whether we used some iceboxes. To me they were relatively one and the same.

Q. Now were there any other differences in this third converted icebox?

A. Except for the change of position or direction of the dividing wall, all three of these were roughly along the same lines.

Q. Did they have the same——

A. I remember the priniciples, but I can't give you the exact details.

Q. Well, were there any differences in the refrigeration system?

A. Not in the system; no, sir.

Q. Did you have the same general type of thermostat in this third box? A. Yes.

Q. There were other differences than you have already explained?

A. My mind works on principles. The principles for all three were alike.

Q. Who is Eddie Bade?

A. Eddie Bade was one of our servicemen.

Mr. Cunningham: Continue.

(Deposition of Thomas Irving Potter.)

A. (Continued): And I am trying to establish the dates that can be authenticated. I turned to a deposition of Eddie Bade, [221] and I found in that deposition that he stated he started work in June of 1929, which confirms my general picture on principle as to about when he started.

Q. Did you have an independent recollection of Bade starting for you prior to that recollection of the transcript?

A. In my mind I had in mind that it was sometime in 1929. I did not have it exact as is on these notes. I made that from his deposition.

Q. Now the next note is opposite the month of September. What is the significance of that note?

A. That was a confirmation of what my memory said, that we had taken over the entire building in the fall of 1929.

Q. Does it have any significance——

A. The note here was merely to give me a confirmation on my own memory.

Q. Does it have any significance with respect to these converted iceboxes that you have testified about?

A. It has a number of connections in my mind, because at that time we had our general office over in the Public Service Building. When we moved or when we took possession of the entire building, we moved Mr. Bronaugh's office over in that building which we then called our factory, and we centered all sales at that time in the factory, and they had the showrooms on the ground floor.

(Deposition of Thomas Irving Potter.)

Q. Was your office also in that building? [222]

A. No, sir; I kept my office in the Public Service Building.

Q. I notice your note opposite October and the reference to the 'Angelus photo of factory and workmen' dated October 19, 1929. Is that Potter Exhibit 1? A. Yes."

Mr. Cunningham: And here it is——

Mr. Cheatham: 3-MM.

"A. Next to what? I have lost the track of continuity.

Q. Next to September and October of 1929, with respect to these converted iceboxes.

A. Well, we started the work on those boxes in the spring of 1929. That work continued. It wasn't all in one day. It was continuous, and we were taking it easy. That continued on through 1929, and I don't remember just when these different models were built. I know they were one following the other. I know we were testing them during that period.

Q. Who worked on them during that period, Mr. Potter? That is, if you recall.

A. I know that we had a foreman of our shop. I think his name was Herman. I am not accurate on names. Don't hold it against me if I am wrong. I think that was his name and in that kind of work we would give a sketch, just a hand sketch and Herman would have the responsibility of executing it. Then Bronaugh and I would check up and follow

(Deposition of Thomas Irving Potter.)

it. We both [223] followed up the work and kept track of it.

Q. Were there any trusted few that worked on these boxes at that time?

A. No, on hookups we usually called the servicemen because they were used to hooking up and so forth.

Q. Can you remember the names of any serviceman?

A. I have already mentioned Eddie Bade. He was a serviceman. We had another serviceman who preceded him, who worked coincidentally with him. His name was Thompson. If I remember correctly, he was the first serviceman we had. He was with us almost from the beginning.

Q. Was he contemporaneous with Bade or do you recall?

A. No, he was before Bade and then he continued on after Bade came, because our work had increased.

Q. Can you recall anybody else working on these converted iceboxes?

A. I don't individualize my memory of personalities beyond that.

Q. Do you recall a Mr. Steele?

A. Yes, Mr. Steele was a salesman selling commercial and domestic equipment.

Q. Did he have anything to do with these converted iceboxes?

A. Not under—not in their manufacture. He was a salesman or in the building—

(Deposition of Thomas Irving Potter.)

Q. How about Mr. Bale? [224]

A. Mr. Bale was our draftsman. He did not have any contact with these boxes until after we had built one of the—can I say the final models, because all of that preliminary work—it didn't pay to try and lay out working drawings when you were just reaching for ideas. Mr. Bale was not brought into it to make any drawings until after we had completed the large box which we hoped would be a commercial model.

Q. How about Mr. Bartlett?

A. Bartlett was a salesman.

Q. At that time?

A. Yes. He was not on the mechanical staff.

Q. Now did you build anything that you characterized as a walk-in cooler? A. Yes.

Q. Will you tell us about that?

A. That was built in the fall of 1929.

Q. How do you fix that date, Mr. Potter?

A. Because that was set up on the ground floor almost coincident with our moving in and that is how I tie that in my mind. Now later I checked the records and confirmed that. Of course, my instincts are to bring in the confirmation. This gentleman over here seems to object. I don't know what to do about that.

Q. What records did you check?

A. I have before me here a photostatic copy of the Potter [225] Refrigerator account with the Anderson Sheet Metal Works.

Q. Of what town?

(Deposition of Thomas Irving Potter.)

A. In Portland, Oregon. Mr. Irving R. Halsey obtained these from Anderson or he had them made with Anderson's permission from his books.

Q. Is that in connection with the suit against Stewart-Warner? A. I think it was.

Q. Did Mr. Halsey give those to you?

A. Yes, we had them here in our records.

Q. How did you get that record?

A. I found it here in our record.

Q. What does that record disclose?

A. That record discloses the purchases that the Potter Refrigerator Company made from the Anderson Sheet Metal Works and is definitely related to the work that we did, or that was going on, because they manufactured our sheetmetal parts for us.

Q. Now, can you give us, with reference to that record, any dates accurately—more accurately than you have done?

A. I have lost track of this. This is all of the Anderson record here, and over here. Those are the records we have from the Anderson Company and they are now my records in my possession.

Q. Well, let me get them in chronological order. I hand [226] you, Mr. Potter, five photostatic sheets apparently a ledger account of T. Irving Potter, the first entry on the first sheet being 1929, March 18, and the last entry on the last sheet being January 11, 1930.

A. May I state for the record that the first one

(Deposition of Thomas Irving Potter.)

shows T. Irving Potter. After that it is Potter Refrigerator Corp.

Q. That is correct. Can you point out in those five sheets any item that has significance to you with respect to the building of this walk-in cooler unit?

A. The first item I come to is dated December 6, 1929, and that is brine tank for cooler, charge $70. On December 31, 1929, four pans for cooler.

On January 6, 1930, four pans for walk-in cooler.

On Januray 8, four additional pans.

Now that was the walk-in cooler that we spoke of and there can't be any question but what that is what that is.

Q. Was that January 8 or January 6?

A. January 6, brine tank, four pans—January 6, four pans for walk-in cooler. And January 8 for four additional pans for cooler. So that is the sixth and the eighth of January, 1930.

Mr. Cunningham: I ask that the two sheets containing the references—(Off the record)—I will correct that. The one sheet marked as Potter's Exhibit No. 2, for Identification." [227]

Mr. Cunningham: I now offer that as Plaintiff's Exhibit 3-NN.

Mr Ramsey: We do not know the materiality of it, of the bills for something, but we will not enter an objection.

"Mr. Cunningham: Q. I show you, Mr. Potter, a photograph entitled 'Potter Refrigerator Conven-

(Deposition of Thomas Irving Potter.)

tion, Portland, Oregon, January 17-18, 1930.' Can you identify that photograph?

A. I am familiar with this photograph, sir.

Q. How did you get it?

A. It is part of our record.

Mr. Cunningham: I offer it in evidence and ask that it be received in evidence as Plaintiff's——"

Mr. Cunningham: As Plaintiff's Exhibit 3-OO.

Mr. Ramsey: That is one we objected to, and continue our objection.

The Court: This is the one that has a date on it. We are cluttering up the record with a lot of things, but I am going to allow this in. I think, Mr. Cunningham, that the jury is going to have a lot of things which are important, and let us not try to clutter up the record with things that are—about which the witnesses have already testified.

Exhibits 3-OO and 3-NN are received, both [228] of them.

(Thereupon, the exhibits referred to, previously marked Plaintiff's Exhibits 3-OO and 3-NN, were received in evidence.)

"Mr. Cunningham: Q. Well, Mr. Potter, can you identify yourself in the photograph?

A. Yes, I am right here, if I can point it out.

Q. Were you present when it was taken?

A. I was certainly present or I wouldn't be in the picture.

Q. Has it been in your possession since it was taken? A. Yes.

(Deposition of Thomas Irving Potter.)

Q. Do you recognize anybody else in the photograph?

A. I am poor on remembering names and faces, but seated at my right or to the left of me in the picture is Mr. Bronaugh. On the front row, the third from the right, is Mr. McClurge—I believe that is the spelling—I am not certain. I think that should be sufficient to identify it.

Q. I ask you, Mr. Potter, was that photograph taken on or about the dates stated in the legend of the photograph?

A. That is unquestionably the date that was marked by the photographer, and that is the date.

Q. Do those dates help you with respect to any of these boxes that were converted iceboxes as you now call them? A. Yes, they do. [229]

Q. What were their conditions as of that date?

A. By that time we had completed the three models I spoke of before, and we were still continuing in our work, because my mind works on association and I have a definite memory of those in relation to this photograph. We had a number of dealers scattered throughout the Northwest who were selling our commercial equipment for grocery stores, butcher shops, and so forth.

Q. Have you anything to illustrate that equipment in front of you?

A. Yes, this would—this would illustrate some types of a conversion.

Q. Where did you get this photograph?

A. From my records."

(Deposition of Thomas Irving Potter.)

Mr. Cunningham: I offer in evidence as Exhibit 3-PP——

Mr. Ramsey: We have no objection.

The Court: Very well.

Mr. Kolisch: That has been admitted, your Honor.

The Court: Yes.

"Mr. Cunningham: Q. Will you tell me who made that photograph?

A. That was made by the Angelus Studio, sir, in Portland. May I see that photograph of the Dealers' Convention? This picture was made some time before the Dealers' Convention. I can see that and anyone else can see it by the consecutive [230] numbers which Angelus used. That is a lower number by far than the Dealers' Convention.

Q. By that you mean Potter's Exhibit 4?

A. Yes."

The Court: Where are you going from there? Are you going to Page 181?

Mr. Lucas: Yes.

The Court: ~~Do we start on a new~~ subject now?

Mr. Cunningham: Sir, I do not recall. Yes, it runs right along, and it would be a good breaking point.

"Mr. Cunningham: Q. Do you remember Mr. Steele?

A. I remember Steele's personality very well. I know that he came to work for us immediately after this so-called Dealers' Convention, and I remember his terrific enthusiasm when he had been

(Deposition of Thomas Irving Potter.)

shown this coming equipment, if I could call it that, and that is a refresher of my memory to that effect. I also remember in relation to this Dealers' Convention that prior to the Convention Mr. Bronaugh and myself had discussions as to what was to be done at the Convention, and so forth. That was his Convention. He was taking responsibility. But I remember very clearly that we discussed what they should be shown and should not be shown. That Bronaugh and some of the rest of the organizations were quite enthused on the shape that this new product was taking, but we discussed whether this dealer should be shown any of this or not. That I [231] remember very clearly, and it was agreed that we would not show them anything that was in the making, particularly this two- or three-temperature box that was called. Sometimes we called it a three-temperature and sometimes a two-temperature, but whether it was called two- or three-temperature we meant the same thing. We agreed that we would not show them that or give them any hint because as salesmen we didn't want them disconcerted. We wanted them to become enthused on what they had to sell, not what was coming. That was very definitely and markedly in my mind, and this Steele deposition just merely gives me a further crystallization and refreshing of my memory along those lines.

Q. What happened to these three converted iceboxes, Mr. Potter?

A. As was our custom, when we had experi-

(Deposition of Thomas Irving Potter.)

mental models and we were through with them, we sold them. Many of our employees found an opportunity to buy something very cheap they could use. Sometimes they brought friends in and once in a while people would walk in off the street and those models were sold at that time.

Q. Do you have any records of any such sales?

A. Unfortunately, I do not, because the shop record when we moved our headquarters to Buffalo and did away with the shop, the people in charge of dismantling the shop discarded all of our shop records and it was very unfortunate for me, because we do not have those shop records. Those sales were [232] made from the shops. They were not made through the sales department.

Q. Can you date those sales in any way or in any fashion from memory?

A. Yes, sir; I have a very definite basis of dating those sales.

Q. Well, will you tell us what that basis is?

A. That ties in with the work on the patent. Mr. Birkenbeuel was the original attorney on my patent case. He unfortunately allowed enough time to elapse before he forwarded to me the last Patent Office action, so that before I could reply to it the time allowed by the Patent Office for reply had been exhausted. As soon as I found that out I immediately got in touch on long-distance telephone from Buffalo to New York and called Mr. Bond, a patent lawyer in New York. I asked him to come to Buffalo and take over the case.

(Deposition of Thomas Irving Potter.)

He came to Buffalo, conferred with me, returned to New York, and started work on the case. It was necessary for him to make a decision due to this lapse of time to make a decision as to whether he should drop the filing date and start a new application, or whether to fight it through and see whether he could get this original patent reinstated.

When it reached that point, I came to New York and had a conference with him and this is very vivid in my [233] memory. He explained to me that if any machines had been sold two years prior to the date at which he was trying to reinstate the patent and the patent was dropped and a new date established or a new application made, the patent might issue, but if machines had been sold two years prior to that, after the issuance of the patent if somebody brought out the fact that those machines had been sold that would void the patent.

He discussed that fully with me and asked whether such sales had occurred. That was many years ago—if you will look at the dates. At that time my memory was very vivid and sharp and fresh as to occurrences previously.

After he explained it—with my memory fresh at that time—and I told him of certain sales that had been made, and so he had me sign an oath that such sales had been made two years prior to the date at which he was asking this patent to be reinstated.

He impressed on me—and this I will never forget—that I must be strictly careful that I could not

(Deposition of Thomas Irving Potter.)

sign that oath if such sales had not been made, and I know from that, because at that time I would not have signed that oath if those sales had not been made prior to that two-year period. I signed that oath, that discussion is vivid in my mind, and I know that those sales were made.

Q. I direct your attention to the last paragraph of your [234] affidavit dated November 5, 1932, appearing at Pages 23 and 24 of the file wrapper of your original patent, No. 2,056,165.

A. Yes, sir."

The Court: What page are you reading?

Mr. Cunningham: Sir, that is a question that we agreed on in substitution for the one that appears at the bottom of Page 185. It is written in my longhand.

The Court: That is all right.

"Mr. Cunningham: Q. First, what is the date of that affidavit?

A. The date is the 5th day of November, 1932.

Q. Is that the affidavit to which you refer?

A. Yes, sir; that is the affidavit to which I refer.

Q. And does that last paragraph contain the statement to which you refer?

A. It does, sir.

Q. Now, did these converted iceboxes which you say were sold—did they embody proportional installation? Well, did they or did they not?

A. I do not think they did. I cannot swear to it. I do not think they did.

(Deposition of Thomas Irving Potter.)

Q. I show, Mr. Potter, a negative photostat of what is apparently a bill of the F. A. Anderson Manufacturing Company, Third and Glisan Streets, Portland, Oregon, made out to the Potter Refrigerator Corp., and bearing the date November [235] 20, 1930. Do you recognize that?

A. I do, sir.

Q. What is it?

A. That is a bill on the billhead of F. A. Anderson Manufacturing Company, of sheetmetal products.

Q. For what equipment?

A. That bill was for a brine tank and liner that was used in building one of our two- or three-temperature boxes, whichever you want to call it. That particular box later became known in my organization as the Barry box. The reason that that name was attached to it was that at a later period Mr. Barry of Portland, Oregon, purchased that box and had it sent to his summer home in Gearhart Beach.

Q. Does this date of November 20, 1930, have any significance with respect to the time the Barry box was built?

A. That is a very significant date because Anderson built not only this brine tank and liner, but he also built a liner for the upper compartment of this box. That liner and brine tank were delivered to the Mathews Refrigerator Company, and around those two liners Mr. Mathews built a four-door refrigerator, utilizing conventional construction, which was common at that time in iceboxes, but

(Deposition of Thomas Irving Potter.)

this was the first box which we built as a complete box from the ground up. Up to that time what we had made were conversions of iceboxes.

Q. I notice, Mr. Potter, that you have referred to a second [236] photostat of a bill, what is apparently a bill from the Mathews Refrigerator Company, dated December 18, 1930, and directed to the Potter Refrigerator Corp.

A. That covers the box that Mathews built around what was supplied to him by Mr. Anderson.

Q. Are both of these photostats from your regular records? A. Yes."

Mr. Cunningham: I offer them in evidence and ask that they be marked as Plaintiff's Exhibits 3-QQ and 3-RR.

Mr. Ramsey: We have no objection.

The Court: They may be admitted.

(The exhibits referred to and identified above as Plaintiff's Exhibits 3-QQ and 3-RR were thereupon received in evidence.)

"Mr. Cunningham: Maybe it would help your understanding, Mr. Ramsey, if I would refer to the application date for the patent to Gibson, original Patent No. 2,073,741, which I believe was reissued and re-reissued, both reissues having been cited by the defendants in that date. That date is September 30, 1930. I assume the defendants are relying upon this as anticipatory of the patent in suit, are they not?

Mr. Ramsey: I state for the record that that

(Deposition of Thomas Irving Potter.)

has been cited as prior art, prior to the original Potter patent from [237] which the reissue in question sprang.

Mr. Cunningham: As merely a state of the art reference and not an anticipation.

Mr. Ramsey: In somewise it anticipates it, which is our contention.

Mr. Cunningham: Well, it is cited as anticipatory.

Mr. Ramsey: Not wholly so."

The Court: I think this is a good place to stop. Ladies and Gentlemen, we are going to take a full two hours today for lunch, and we will return at 2:00 o'clock.

(Thereupon the jury retired for the noon recess.)

The Court: I am going to try to finish this Potter deposition this afternoon. It is a long one. We have not done too well. It took about two and a half to three hours, and let us finish that and get that behind us today.

(After further discussion off the record Court adjourned for the noon recess.) [238]

Afternoon Session

(Court reconvened, pursuant to adjournment, at 2:00 o'clock p.m., and the following further proceedings were had herein:)

The Court: Mr. Cunningham, go ahead. Page 190.

(Deposition of Thomas Irving Potter.)

Mr. Cunningham: "Q. What is your best recollection with respect to the building of the box that embodied this special brine tank and the four-door refrigerator shown in Potter Exhibits 5-A and 5-B?

A. That was built in the fall of 1930, sir, and was in operation."

The Court: Just one second, Mr. Cunningham. What is 5-A and 5-B? What are the new numbers for those exhibits?

Mr. Cunningham: Well, sir, I seem to have 6-A and 6-B before me.

The Court: Oh, you can come back to it later and Mr. Cheatham will give it to you.

Mr. Cunningham: Well, I think my recollection is accurate, your Honor; there are the two.

Mr. Cheatham: 3-QQ and 3-RR.

The Court: 3-QQ. 3-RR.

Mr. Cunningham: They are the bills, I think.

The Court: They are not pictures. They are just bills from that to Admiral Refrigerator Company and Anderson Company. [239]

Mr. Cunningham: My recollection is that there is a drawing. I think they have, sir, been offered and received.

The Clerk: They are in, your Honor.

Mr. Cunningham: "Q. Can you say whether or not it was prior to November 20, 1930?

A My memory is that that was built earlier because I have a memory of its being in the fall.

(Deposition of Thomas Irving Potter.)

Q. Can you give us any more accurate testimony than just that it was earlier?

A. Not at this moment, I can't.

Q. Well, maximum or minimum—two weeks or two months, or what?

A. Well, I would say—from the date you mentioned?

Mr. Cunningham: November 20, 1930—before that.

A. (Continued): I would say probably it was in October. To me that is in the fall and certainly it could not have been built after they billed us. It was built before.

Q. Can you tell us as accurately as possible when the Barry box was sold?

A. I think from my unassisted memory, without referring to notes—I think it was approximately a year after, because I know that was on the floor for a long time.

Mr. Byron: A year after what?

The Witness: After it was built and in operation.

Mr. Cunningham: Which he has estimated to be in October— [240] October, 1930 or 1931.

Q. I show you, Mr. Potter, a couple of photographs and ask you to identify those if you can?

A. Those are two pictures of the same box, one closed and the other the doors open.

Q. What box is that?

A. That is the first box that was built after the so-called Barry box was built.

(Deposition of Thomas Irving Potter.)

Q. What does it represent?

A. This is a picture of the first cabinet we built after and almost immediately after we built the Barry box. The functioning of the Barry box was so successful that we felt that all that remained was to duplicate the Barry box roughly and include in that a machine compartment so that we had a single unit.

Q. Was that the first of the machine compartment?

A. That was the first box we built that was a complete unit with the machine unit in it, so it could be sold as a complete article of merchandise.

Q. Can you give any estimate of the time when that was built?

A. That was built within one or two months after the completion of the Barry box.

Q. Which I believe you placed about October of 1930; is that correct? [241]

A. Approximately, yes, so this would have been built, without referring to anything to refresh my memory, I can do that, because I have some definite places that I can remember or refresh my memory, I can do that, because I have some difi- in December of 1930.

Q. Well now will you refresh your memory from any source you can and give us an accurate date, if you can?

A. I can refresh my memory from records that I have, sir.

Q. Would you please do so, sir?

(Deposition of Thomas Irving Potter.)

A. That is from the Anderson box, a copy of which I have. I don't have them here.

Q. Are these they? A. Yes.

Q. The group that I handed you does not contain Potter Exhibit 2, which is one of those entries or entry sheets.

The Witness: On December 26, 1930, Anderson billed the Potter Refrigeration Corp., for one dome light, one door swing, monel liner for refrigerator box, one brine tank. Now that was the billing for the equipment that went in this box.

Q. By this box, are you referring to the pictures that I just showed you?

A. Yes, and I can definitely identify that without a question of doubt, because that is the first time we had ever used a dome light in any refrigerator we built. At that time the only dome lights available were the type that were used in [242] automobiles.

Q. Do you see a dome light in that picture?

A. Yes, I see it clearly. I hadn't noticed it before. That gives me a definite identification of that box.

Q. Are these pictures part of your regular record? A. Yes."

Mr. Cunningham: I offer those pictures in evidence and asked that they be marked. Exhibit 3-SS and Exhibit 3-TT.

The Court: Are they in evidence already?

Mr. Cheatham: Yes.

Mr. Cunningham: Are they?

(Deposition of Thomas Irving Potter.)

Mr. Cheatham: Yes.

The Court: If they are in evidence, Mr. Cunningham, don't read that.

Mr. Cunningham: They are in evidence.

The Court: All right. I might suggest from now on, Mr. Lucas, you are Mr. Lucas and you are Mr. Byron and you are Mr. Ramsey. Don't repeat the names just because you represent everybody on the defendants' side, and the same with Mr. Cunningham. You don't have to say "Mr. Cunningham." Just ask the questions.

Mr. Byron: No objection.

Mr. Maguire: Unless there be an interpolation from counsel who is not examining in this deposition.

The Court: Well, I thought that Mr. Cunningham takes [243] the part of all of the plaintiff's attorneys.

Mr. Maguire: Yes.

The Court: When Mr. Cheatham reads it he is Mr. Cunningham, and yourself or anyone else.

Mr. Maguire: When we are reading from the deposition. Now, there have been and there probably will be interpolations which were probably by Mr. Byron at the time the deposition was taken, but I suppose when there is that interpolation in the direct or an interpolation by opposite counsel in the cross that ought to be indicated in the record.

The Court: Yes. But Mr. Lucas makes the statements on behalf of Mr. Byron.

Mr. Maguire: Oh, I see. All right.

(Deposition of Thomas Irving Potter.)

The Court: He doesn't say "Mr. Byron." He just makes the interpolation.

Mr. Maguire: Just so I clearly understand it, your Honor.

Mr. Cunningham: "Q. Did that box have a name?

A. It later acquired a name.

Q. Well, what was that name?

A. That was sold to a Mr. McChesney, and he was the purchaser of that box and so within the organization it became known as the McChesney box.

Q. When did he purchase it, as accurately as you can remember?

A. He purchased that sometime in the year 1931, and I would [244] say within nine months to a year of its completion, which is my best memory.

Q. Do you mean of the completion of the box?

A. Of the finished box, yes.

Q. Did that box embody proportional or relative insulation?

A. That box had a differential of insulation between the upper and the lower compartments; that is the two compartments were differently insulated.

Q. Was the same thing true of the Barry box?

A. Yes, that is definite. The same thing is true of the Barry box.

Q. Mr. Potter, in the case of the so-called Barry box, was the machinery, motor and compressor, et cetera, contained within the cabinet or not?

A. No, the compressor equipment was set beside the box.

(Deposition of Thomas Irving Potter.)

Q. Mr. Potter, I wish to quote again from the Stewart-Warner record, this time at page 591——

Mr. Ramsey: May the record show that I make the same objection?

Q. (Continued): And from the testimony of Mr. Charles W. Bale, and I ask you in advance whether you read this testimony of Mr. Bale?

A. Yes, sir, I did.

Q. It was a deposition, I notice—I would like to change that. It is page 580." [245]

The Court: Is there anything for me to pass upon? Mr. Byron made the objection.

Mr. Cunningham: I think it was a hangover from an objection that we agreed was out, your Honor.

Mr. Byron: Nothing, your Honor.

The Court: Well, if that's the case, don't read it.

Mr. Cunningham: (Reading from a deposition contained in the Potter deposition.)

"'Q. Now I call your attention to a drawing which has been marked Plaintiff's Exhibit 83 in this case, and ask you whether you are able to recognize that drawing? A. Yes, sir.'"

The Court: One second. Every time you say "Q" say "Question" and "A." "Answer."

Mr. Cunningham: "'Q. As what do you recognize it?

A. As three-temperature cabinet for household refrigerator.

(Deposition of Thomas Irving Potter.)

(Q. Do you know by whom this drawing was made? A. I made it myself.

Q. And at what date?

A. Very shortly before December 17, 1930.

Q. I notice that this drawing is dated December 17, 1930. Is that date put on in your handwriting? A. Yes, sir.

Q. Was it put on or about that date?

A. I believe so. That was usually the case after the drawing [246] is finished. The last thing is the title put on and dated and signed.'"

The Court: Just one second.

Ladies and gentlemen of the jury, what Mr. Cunningham has been doing which seems to have caused a little consternation is that he is reading the questions and answers that were propounded to a Mr. Bale in another case, so he is just reading both the question and the answer which is perfectly proper, because on the basis of that testimony he is going to ask the witness Potter a question.

Go ahead, Mr. Cunningham.

Q. (By Mr. Cunningham): Mr. Potter, I show you a tracing, and can you identify that?

A. That is a drawing of a box similar to what we called the McChesney box which I have just identified. It is marked as the date February 7, 1931.

Q. Can you say whether or not that was a drawing made by Mr. Bale?

A. That was a drawing made by Mr. Bale. He has the initials—he initialed the drawing. That is

(Deposition of Thomas Irving Potter.)

not the first drawing in my memory which he made. As I look at it, I believe that this drawing was made for a metal sheath cabinet. The McChesney, as I remember it, was a wooden sheath cabinet. I definitely remember—I definitely remember that the first time development work was after the McChesney box was [247] completed. All the drawing up to that time had been sketches given to workmen or given to Mathews or Anderson.

Q. Were they sketches by Mr. Bale?

A. No, I don't think Bale entered into any of that. They were sketches given either by me or made by me or by Mr. Bronaugh, and I remember that this is a later drawing, because as soon as the McChesney box—we will call that—was completed, when they called Mr. Bale down that box was on the first floor. Mr. Bale had his office—drafting office—on the second floor. We called him down and asked him to make a complete detailed drawing of that box and that drawing must have been started or made in the fall of 1930. This is marked February 7, 1931.

Q. Was Mr. Bale an independent draftsman or a full-time employee?

A. No, he was a draftsman in our employ. Most of his work up to this time—in fact, all of it, was consumed on our pumps and compressors and our assemblies.

Q. The testimony I read you from Mr. Bale's deposition refers to a drawing of December 17, 1930. That would be correct, would you say?

(Deposition of Thomas Irving Potter.)

A. That would be correct, sir."

Mr. Cunningham: I offer that drawing that the witness has identified in evidence as Plaintiff's Exhibit 3-UU.

Mr. Maguire: -UU. [248]

Mr. Cunningham: 3-UU. Two U's.

The Court: Has that been admitted?

The Clerk: Yes, your Honor.

Mr. Cunningham: It's not marked by any clerk's stamp to show that it was admitted. I don't know, the record may show it.

Mr. Byron: No objection.

The Court: It has been admitted.

The Clerk: It has been admitted.

The Court: You did. All right. I just said leave it in front of you and then it will be picked up later. Go on to page 202.

Mr. Cunningham: 200 now, sir.

"Q. Now, I show you blueprints and ask if you can identify each of those?

A. It is the drawing of a box similar to the one we have just looked at. It bears the date 7/26/31."

Mr. Cunningham: I offer in evidence, if it hasn't already been received, Plaintiff's Exhibit 3-VV.

The Clerk: They are all in.

The Court: Mr. Bishop says it's in. Pick up those two exhibits, Mr. Bishop, and put them in the file.

Mr. Cunningham: "Well, will you take the next drawing, Mr. Potter, and identify it?

(Deposition of Thomas Irving Potter.)

A. This is a detailed structure on the cabinet which I have [249] just identified and is marked 'Door Details, three-temperature cabinet.' This has a date of 7/26/31."

Mr. Cunningham: Again I offer in evidence, if it hasn't already been received, Plaintiff's Exhibit 3-WW.

The Court: Is it in?

The Clerk: Yes, those are all in, all that he has.

Mr. Cunningham "Q. Can you identify the next one?

A. Yes, this is a drawing of the same type of box that we have had under discussion. It is a later design in certain minor details. The drawing is marked 'Potter three-temperature household refrigerator cabinet.' The date on the drawing is 3/3/31. I initialed, or rather it is initialed by the draftsman, W. C. Bale."

Mr. Cunningham: I offer that drawing in evidence as Plaintiff's Exhibit 3-YY.

The Court: Is it in?

The Clerk: They are all in that he has, your Honor.

Mr. Cunningham: I believe, your Honor, now, and I am slow about it, I think these are the drawings that we showed the jury the other day.

The Clerk: They are.

Mr. Cunningham: "Q. The next one?

A. This is a detailed drawing of certain door details pertaining to the box which I have just

(Deposition of Thomas Irving Potter.)

identified and is marked under the date of 3/3/31 and is initialed by C. W. Bale." [250]

Mr. Cunningham: I merely identify that as Plaintiff's Exhibit -ZZ already in evidence.

Mr. Cheatham: 3-ZZ.

Mr. Cunningham: Correct. 3-ZZ.

The Court: Where are you reading from?

The Bailiff: 203, center of the page.

The Court: 203. I think it's a good thing, the next time you come to an exhibit, let's hold it up to the jury so they know what you are talking about.

Mr. Cunningham: "Q. Have you another one, Mr. Potter, there?

A. I have another one before me which is a detail of two"——

Mr. Cunningham: Will you go ahead, please?

The Bailiff: "Which is a detail of two things that are included in the structure of the layout that we are discussing. This drawing is dated 3/3/31 and initialed by C. W. Bale, marked 'Brine tank and baffles, three-temperature cabinet.' This drawing shows the brine tank as an integral part of the liner that goes into the frozen storage compartment of that box. It also shows the baffle plate which was used in front of the finned coil in the food compartment of that box."

Mr. Cunningham: I identify that as Plaintiff's Exhibit 3-AAA. I believe that's already in evidence.

The Court: Just show it to them. They have already seen it, but I want them to be able to compare the number with the exhibit they have already

(Deposition of Thomas Irving Potter.)

seen. It makes the testimony [251] much more meaningful.

(Whereupon the Clerk exhibited the mentioned exhibit to the jury.)

Mr. Cunningham: "Q. Mr. Potter, I show you three other blueprints and ask if you can identify each of those? A. I can, sir.

Q. Would you take whichever one is in front of you?

A. The first one in front of me is marked 'Brine tank for three-temperature cabinet. The date is 1/29/31. It is initialed by C. W. Bale. This is a drawing of the brine tank and liner that went in the frozen storage compartment of the McChesney box. I have just identified that by checking it against the photographs of the McChesney box, and I know I am correct."

Mr. Cunningham: That is identified as Plaintiff's Exhibit 3-BBB, and I believe it's already in evidence.

May it be understood, your Honor, if I make a mistake as to what is in, that I now offer these in evidence?

The Court: Yes. But they are already in. Mr. Bishop has noted that on several occasions.

Mr. Cunningham: "Q. Can you identify the next one, Mr. Potter? A. I can, sir.

Q. Will you do so, please?

A. This is entitled '22-32, Fin Coil for Three-Temperature [252] Cabinet. The date is 1/30/31. It is initialed by C. W. Bale, and this is a drawing

(Deposition of Thomas Irving Potter.)

of the finned coil which went into the McChesney Box."

Mr. Cunningham: That is Exhibit 3-CCC.

"Q. Can you identify the next blueprint?

A. The next drawing is door details of the three-temperature cabinet. This is dated 2/7/31, initialed by C. W. Bale."

Mr. Cunningham: I identify that as Plaintiff's Exhibit 3-VVV.

"Q. Please state whether or not it was the practice of Mr. Bale to make his drawings from sketches or from actual constructions——

A. There was no common practice on that. Sometimes I would go to Mr. Bale and make a sketch which he would develop as a working drawing. In this particular instance, the boxes up to this point had been built and completed from sketches and Mr. Bale then came in and made mechanical drawings from the box itself.

Q. Is that true of all of the sketches you have identified here?

A. That is not necessarily so. The first drawings he made were made from the box itself. That was in the fall of 1930. Some of those other drawings were undoubtedly made in planning the added boxes to be built. So those were laid out by Mr. Bale on a drawing board before the boxes were built and [253] then those boxes were built from the boxes which we supplied.

Q. Now, Mr. Potter, what did you do with respect to obtaining patent protection on these house-

(Deposition of Thomas Irving Potter.)

hold refrigerators of the construction you have described?

A. As soon as what we are calling the McChesney box was completed and tested, then I called in Mr. Birkenbeuel and sold him the box, explained its operation, explained its features, and asked him to draw up patent papers to cover it.

Q. Did he do so?

A. He did that, and we applied for a patent as soon as his work was completed. The patent was applied for on February 16, 1931.

Q. That is the application for the original of the patent in suit, is it not?

A. That is the application of the original patent in suit, yes.

Q. Now, what next did you do after filing that application?

A. We then proceeded to make our first metal covering, or to use the expression I used before, metal sheath box.

Q. Do you have any recollection of when you proceeded with that?

A. That continued right after the McChesney box had been completed and it was essentially the same box, except that this was a metal box instead of a wooden box. The principles and proportions were the same. [254]

Q. Have you any means of fixing the quantity and dates of these metal boxes?

A. I have, sir.

(Deposition of Thomas Irving Potter.)

Q. State what it is, please.

A. I refer to the Anderson records which are merely confirming my independent memory. These records show that on the 20th of February we received a bill.

Mr. Byron: What year?

The Witness: 1931; covering three-temperature refrigerator, $27. Monel liner for same, $34. Copper brine tank, $42.50. Baffle plate, $2.50. Now that was the first metal covered or metal sheathed box. That followed the structure of the wooden box—I should have said the construction.

Q. Now, have you any record of the Anderson Company that refreshes your recollection as to the further activity with the metal box?

A. I have my own independent memory of that. The Anderson is merely to confirm my independent memory.

Q. Tell me how many of these metal cabinets were built by the Anderson Company?

A. We built all totaled either 12 or 13. I believe it was 13, because I have just told you about billing a single one. Then following that, almost immediately, as soon as that was completed and satisfactory, then we built six further boxes in one batch, all the same as this metal box which I have just [255] told you about. The completion of those we then built—upon the completion of those we then built an additional six, so all totaled we started with the McChesney wooden model and we then built a single metal model. We then built six of

(Deposition of Thomas Irving Potter.)

the metal boxes, following with another six. That would make a total of 14 boxes, if I am correct.

Q. Did these all have the refrigerating compressor and motor in the cabinet?

A. These were all the same as the McChesney box, a complete unit, with the machine and the cabinet all in one compartment—in one part rather or all in one piece. Could I correct it and say, all in one structure, which I think would be better?

Mr. Ramsey: You mean, all within one cabinet?

The Witness: Yes, sir.

Q. (By Mr. Cunningham): Well, can you give us any more definite date as to the building of these first six boxes?

A. I have confirmed my memory on that again from the Anderson record and—I don't want to get too tired so I don't, or I can't go on tomorrow, if I do get tired, but I am ready to go on.

From the Anderson, it shows March 19, 1931, one brine tank, three-temperature box, one food compartment liner, cover outside cabinet, extra tank for three-temperature. Now that is undoubtedly the billing of the first metal box which I spoke of. [256]

Q. Now how about the six?

A. I am coming down to that.

Mr. Ramsey: Do I understand you are testifying as to the completion date or are those the completion of parts of the supplier?

Mr. Cunningham: Can you answer that question, Mr. Potter? I mean, if you know.

The Witness: They would be very close to the

(Deposition of Thomas Irving Potter.)

completion dates one way or the other; probably a few days, because naturally he is not going to bill us until he has completed and delivered what he has given us.

Mr. Ramsey: I mean, the completion of the complete cabinets and refrigerators with the mechanisms therein?

The Witness: That is what I am referring to, I would say it would be within a few days, one side or the other.

Mr. Ramsey: Thank you.

Q. (By Mr. Cunningham): Can you give us the date from that record of the Anderson Company?

A. Yes. May 28, 1931—six three-temperature cabinets. Six casings outside. Six food compartment liners and five brine tanks.

That is interesting, because from the earlier first metal box in his billing he billed it as one extra brine tank, so evidently that is why the five brine tanks were billed here instead of six. He charges $528.50. July 9, 1931, [257] they billed us for six cabinets covered, six linings, six tanks. The bill was $561. That was the second batch of six, three-temperature boxes.

Q. Now, Mr. Potter, was this the complete construction of cabinets that you can recall prior to the first half or rather prior to August of 1931?

A. Yes, sir, I think that covers them completely, as I remember them.

(Deposition of Thomas Irving Potter.)

Q. Now, what else did you do after July of 1931, with respect to this refrigerator business?

A. I left Portland in the early part of 1931. I left before these last cabinets were built. That was under the direction, built under the direction of Bronaugh.

Q. Was he still with you? A. Yes.

Q. Where did he stay?

A. He was in Portland. I came to Buffalo to establish sales headquarters, commercial sales headquarters, for our three-temperature cabinets.

Q. By that time it had been pretty well agreed that you were going to market these cabinets?

A. That is why we came to Buffalo, because we did not feel that we could market anything nationally from the West Coast. The freight would be against us. We came to Buffalo, because we felt that that would make a sales center. We could [258] go in any direction from Buffalo overnight and reach the biggest markets.

Q. Did you have any negotiations at about this time, the middle of 1931, with a concern called the Jewett Refrigerator Company in Buffalo?

A. One of the first things we did when we came to Buffalo, we had two or three of these cabinets which we had been speaking of shipped to Buffalo. In Buffalo there was the Jewett Refrigerator Company.

Q. Who were they?

A. The old line refrigerator company that had been in business many, many years, and largely on

(Deposition of Thomas Irving Potter.)

iceboxes, but they had a large business of commercial refrigeration, big commercial installations for mechanical refrigeration, such as hotels, clubs and some of the wealthy people's homes you could afford to keep a big home. That was the bulwark of the Jewett business. They had an outstanding reputation for quality.

Q. Did you select that company?

A. Yes, I selected that company, hoping that they would be able to do the manufacturing for us under contract, Jewett. My first contact with them —with my first contact with them, they or I showed them the boxes we had brought from Portland and they stated that certain structural changes should be made in order to put it on a better manufacturing basis.

I engaged them as the first step to redesign [259] the box, not in principle, but in detail, to make it better and easier for manufacture. At that time I met Mr. Bommer. Mr. Bommer was the chief engineer of the Jewett Company. I sat in with Mr. Bommer, and together we worked out the working drawings of what according to him, based on his manufacturing experience, would be the proper way to construct it. They made two cabinets for us, one large and one small.

Q. Can you state the date when they made the two cabinets?

A. Oh, that would be the middle of 1931, the summer of 1931.

(Deposition of Thomas Irving Potter.)

Q. By the way, Mr. Potter, what did you show the Jewett cabinet?

A. I showed them one of the cabinets that we had shipped to Buffalo that we were talking about, and it was from that that Mr. Bommer and I worked. He supplied the manufacturing experience in manufacturing cabinets. I had never manufactured cabinets. He supplied that. With his experience, from that standpoint, we designed two cabinets which met with his okay on the basis of production. They met with me okay on their ability to perform. They completed those cabinets and on their completion I negotiated with Edgar Jewett, the head of that business, for production. Mr. Jewett and I arrived at an agreement. His attorney was to put it in contract form.

A few days later his attorney came to me or to my office with a contract. I did not consider that the contract [260] was in the spirit of our agreement between Jewett and myself, but he had to interpose his own thoughts on how the deal should be made. The result was that that deal fell through. That was in the latter part of the summer of 1931. As soon as that fell through I immediately got on long-distance telephone. I called the Rex Company in Connersville, Indiana, who were cabinet makers. We had bought a number of those or a number of their cabinets when we were operating in Portland, and installed our machines in them and sold them as a complete unit, so I was acquainted with the company.

(Deposition of Thomas Irving Potter.)

I also called the Universal Cooler Company. I asked them to send representatives to meet me in Buffalo to discuss production on a new refrigerator.

Within a few days of my call we had arranged a definite date for, can I say, a three-cornered meeting, myself, the Rex Company and Universal Cooler?

That meeting was held. I was present. Mr. C. C. Hull was the president of Rex, and he came himself personally. From Universal Cooler, I believe it was Mr. Gleason. I am not clear on that, whether it was Johnson, the president, or whether it was Gleason. But they represented the Universal [261] Cooler.

Q. Where is Universal Cooler?

A. Detroit, Michigan.

Q. Where is Rex?

A. It was in Connersville, Indiana. They were purely cabinet manufacturers. Universal Cooler were purely machine manufacturers. I had my own compressor equipment, but commercially I was afraid if we included that in this new cabinet our competition would shoot at us and say that our mechanism had not been proven. I figured from a commercial standpoint if we used the Universal compressor that had been on the market for years and had a fine reputation, and nobody could throw anything against our mechanisms. We came to an agreement that the Rex Company were to build our cabinets for us. They were to be shipped to Universal Cooler. They would install the mecha-

(Deposition of Thomas Irving Potter.)

nism and from there they would be shipped direct to dealers.

Q. Now did that contract go into effect?

A. That contract went into effect—that was in the summer of—or thereabouts—toward the end of the summer of 1931. The Rex Company—then we shipped our two models we made at Jewett—not the Portland models—but the Jewett models were supposed to be ready for production.

We shipped those to Rex. Their engineers wanted to make still further changes to fit their methods of production [262] which weren't the same as Jewett. So they redesigned it still another time, from a production standpoint.

At the same time we figured that to enter into the business and be able to compete with others we had to have a more complete line, and so the Rex Company who made cabinets generally for the trade selected certain of their smaller cabinets that we could put out as a semi-competitive—I don't mean that—but as a competitive item—completing our line.

Q. Those were not the two-temperature boxes?

A. We had what we called two de luxe boxes and what we called Potter boxes, but they got that all organized for a complete line, for complete production.

When we knew that that was ready and ready to make deliveries, we then took up with an advertising agency in Buffalo that was Landshet and Bonning. They were an advertising agency in Buffalo.

(Deposition of Thomas Irving Potter.)

and they stopped in and helped us plan our commercial attack. Our first step naturally was to get dealers. The refrigeration industry has a trade paper, have had it for many years, a trade paper called Refrigerator News, or Refrigeration News. I think it is Refrigeration News.

Q. May I interrupt you a minute and show you a copy of what has heretofore been marked Plaintiff's Quinn Exhibit No. 9? Now, is that the ad which you speak of?"

Mr. Cunningham: Unfortunately, your Honor, that is [263] in another group I have here. We will get it in a minute.

"A. That is the ad of which I speak. That ad was planned by the Landshet and Bonning agency and was placed in the Refrigeration News, and that was our first announcement publicly of this type of cabinet."

Mr. Cunningham: It will be in connection with the Quinn deposition, and it is identified in this proceeding as Plaintiff's Exhibit 3-I.

"Q. Referring to the two-temperature type of Potter cabinets, is that correct?

A. Up to that time, we had always been calling it three-temperature. Now we simultaneously were getting this lined up with the manufacturers when they organized the Potter Refrigerator Corporation of New York—pardon me—we organized a company. At that time we called it on the advice of our advertising people 'The Tricold.' We had been using the three-temperature cabinets. They thought

(Deposition of Thomas Irving Potter.)

that would make a better name for it than Potter, so we launched our first sales under the name of Tricold. All of our literature at the beginning was under the designation of the Tricold Refrigerator Company. Later we ran into a conflict on names between the Truecold, which was owned by Montgomery Ward, and they notified us that they considered our Tricold was too [264] close to theirs.

As soon as we got that notice we met the issue and instead of battling with them we changed the name to Potter Refrigerator Corp., and changed the names of the boxes to Potter, so these boxes were introduced to the public first as Tricold and then it carried the Potter name."

Mr. Cunningham: I shall state that the deposition was there adjourned until the next day, October 26th, at the same time and place.

"Mr. Cunningham: On the record, I would like to continue the practice of yesterday and hand you, Mr. Byron and Mr. Ramsey, the memorandum that the witness has himself prepared to assist him in his testimony which I expect to reach now or in very short order.

Q. Mr. Potter, whose idea was it to get these memoranda up in advance of your testimony?

A. That was my own personal idea, sir. I knew I was coming into this deposition, so I sat down and made a calendar.

Q. Now, Mr. Potter, before we get to this new advance outline which we have given the other side, I wish to backtrack just a little bit on yesterday's

(Deposition of Thomas Irving Potter.)

outline. Do you realize that we have so far failed to produce any drawing or written [265] description or document as to these three converted boxes that you testified to? Have you looked for any such documentary evidence?

A. Yes, I am very conscious of that. But when we dismantled the shop in Portland, I was in Buffalo getting organized to get the thing on the market. I left it to others to dismantle the shop and dispose of any equipment we had. They did that, but in doing that they disposed, just threw out all the shop records. We had no records at all, and I have no means of producing them, because they are all gone. They never came to me in Buffalo.

Q. Do you recall that you ever had any formal drawings of these early converted iceboxes by Mr. Bale or anyone else?

A. No, sir. All of that early work was done on sketches. This was not the only experiment we were doing. We were going through many things. The simplest and quickest way was to make a pencil sketch and give it to a workman and Mr. Bale did not enter the picture until after the McChesney box was completed. You know what I mean when I say 'McChesney box.'

Mr. Cunningham: Yes.

A. (Continued): And he was brought down—he brought down a box finished and tested, and we were pleased with it, and it was brought down to make the working drawings. That is the first draw-

(Deposition of Thomas Irving Potter.)

ings that Mr. Bale in any official capacity [266] made.

Q. And some of the drawings——

A. Identified yesterday, yes. Some of those drawings have evidently been lost. I know that I supplied Mr. Bristol of Watson Bristol when they were handling the Stewart-Warner trial—I supplied them with drawings, but somehow or other they have not come back to us. There are a number of things given on the record that Bristol had that never came back to us.

Q. Mr. Potter, do you mean that you supplied Mr. Bristol with any drawings of these early converted iceboxes?

A. No, we did not. The first drawings that we gave Mr. Bristol were the first drawings that Mr. Bale made for the McChesney box, and we have searched and searched, and we can't find them. They never came back.

Q. All right. Will you tell me, please, to the best of your recollection, what was embodied in any one or all three of these converted iceboxes. Just describe them or any one of them. The fundamental principle of——

A. The fundamental principle of our invention was in all three. Each one had two compartments. Each one had a chilling unit in the cold compartment. Each one had a finned coil in the warmth department, each one had a thermostat, and they were in an insulated box with two compartments, one insulated from the other. [267]

(Deposition of Thomas Irving Potter.)

Q. Where was the compressor machinery.

A. The compressor machinery was at the side. At that stage we weren't thinking in terms of propping either up or putting either underneath, because it made no difference in function. So on those early boxes we were only considering the food preservation section, and we just took it as a matter of course to put the machine beside it. We had the use of the machine——

Q. How about proportional insulation?

A. I have given a lot of those—given a lot of thought to that. I do not think the first three had proportional insulation.

Q. How did these experimental converted ice-boxes operate? What results did they get?

A. They got very encouraging results, because we found that on the frozen storage side we could get good low temperatures. As I remember it, between the first and the second we made one step. The first one, as I remember it, we had a series of standard evaporators. There were sections. As I remember the first one, we used one evaporator in one—the standard. That is our wraparound coil evaporator. On the first one we used that. We used a finned coil, which as I remember it, was cut up from a condenser. It had the small fins on it. The second one we used a double evaporator on the cold side. That is the [268] only difference. I am frank to confess, I have tried in my memory to remember what the coil was. I know it was a fin coil. I have a distinct memory on the third one. That is where

(Deposition of Thomas Irving Potter.)

we divided the insulating between the two on a horizontal instead of a vertical. That I know we used a Larkin coil there.

Mr. Ramsey: Is that a trade name?

The Witness: Yes, sir. Now that is as much as I can give out of my memory on those three boxes. They differed in detail but not in principle.

Q. All right, please state whether or not they operated in accordance with the principles——

A. I have already said they all embodied the principles.

Q. The answer is Yes? A. Yes.

Q. Did they get—will you state whether or not they got the results which were your objective as stated in your patent in suit?

A. There is no question about that, sir.

Q. Do you know a Mr. H. B. Hull?

A. I did not know him personally. I know that he was the author of the books that were used as standards in the refrigeration industry in household refrigeration.

Q. I show you, Mr. Potter, four pages of photostats and state for the record that I obtained these this morning from [269] the regular photostat service from the New York Public Library, being the first title page of this entitled 'Household Refrigeration' by H. B. Hull, M.E., published by Nickerson Collins Co., Chicago, being the fourth edition. The title page seems to omit the date. I will state for the record that I recall it was 1933.

(Deposition of Thomas Irving Potter.)

The next three photostats are Pages 56, 557, 558 of that publication.

Q. Are you familiar with that?

A. I am fully aware of this, because I used to own that particular volume of Hull, and I loaned that volume to Mr. Bristol. We tried to find that here. We couldn't, and one, two or three days ago I told you of my memory of this and you said that you would go to the library and obtain photostats. Here are the photostats, which I recognize, of having read in the Hull book which I owned, and which I recall and told you about."

Mr. Cunningham: I offer these photostats in evidence, Plaintiff's Exhibit 3-EEE.

Mr. Ramsey: We have no objection.

The Court: They may be admitted.

(The photostats referred to, previously marked Plaintiff's Exhibit 3-EEE, were received in evidence.) [270]

Mr. Cunningham: I might interrupt at this time, your Honor, to read a short statement in these photostats to the jury. It seems a little more informative than just saying the pages of a book.

The Court: All right; I was hoping a lot of these things would be omitted. It seems to me we are getting off the issue in this case quite a bit.

Mr. Cunningham: Would your Honor reserve until you hear this? I am quoting from Page 56 of Mr. Hull's book on "Household Refrigeration," 1933:

(Deposition of Thomas Irving Potter.)

"The humidity of the air in the household refrigerator has been considered to be too dry from the time of the earliest units that appeared on the market. The low humidity——"

Mr. Byron: That is hearsay, isn't it, your Honor?

The Court: Yes, but you have admitted it.

Mr. Cunningham: "The low humidity is a material but unavoidable consequence of low temperature of the cooling coil. As has been mentioned, the storage of salad vegetables has been successfully accomplished by the use of a container designed to permit only limited circulation. The housewife also covers many of her foods with a dish or paper. The most desirable humidity depends——" It is a very poor photostat—"on many factors, and [271] no single value meets all of the requirements. The evidence available would indicate that a relative humidity of 75 per cent would be the lowest which would be desirable."

I am having so much difficulty reading that page, and it is about all that was on it. I will not read but characterize and state subject to check that on Pages 357 and 358 is a description of the Potter refrigerator.

The Court: All right; go ahead.

(Thereupon the reading of the deposition was continued as follows:)

"Mr. Cunningham: Q. Mr. Potter, have you

(Deposition of Thomas Irving Potter.)

read the description of the Potter refrigerator on Pages 357 and -8? A. Yes, I have.

Q. Have you any correction to make in the description given there by Mr. Hull?

A. I will have to reread it. I remember there was an error. I have forgotten what it was.

Mr. Cunningham: Maybe I can help you, Mr. Potter.

A. (Continued): I can't pick it up. There was something that I called to your attention that was not exactly in that description. Right now I can't pick it up.

Q. Would you read the words, please, and make your correction?

A. 'Figure 107 shows a typical cabinet: the upper part [272] of this cabinet contains a general food storage compartment. The humidity in this compartment is maintained at a desirable high value by means of a separate finned tube-type cooling coil which operates on a defrosting cycle.'

Now that is in error, because that should have been, if he had been correct in his description—that should have been 'on a non-frosting cycle.'

Q. I show you, Mr. Potter, a book which I believe is your property, entitled 'Mechanical Refrigeration and Service,' by Adrian J. Snyder, with the date 1937 on it, published by Louellen Publishing Company, Inc., 39 Union Square West, New York City, and direct your attention to Pages 76, 77 and 78. Are you familiar with those pages?

(Deposition of Thomas Irving Potter.)

A. I am. This is a text book that came from my library, my personal library.

Q. Now to shortcut this a little, have you any correction with respect or any disagreement with the statement of the author made on those three pages describing the refrigerator?"

Mr. Byron: Your Honor, the author is not here to be cross-examined. It is just hearsay evidence.

Mr. Cunningham: No, your Honor, this is a description by Mr. Potter.

The Court: Are you offering the document?

Mr. Cunningham: Yes, sir. [273]

Mr. Byron: I object to it.

The Court: Objection sustained.

Mr. Maguire: It it may please the Court, your Honor has ruled. May we reserve the right to discuss that matter with your Honor later?

The Court: Yes. I told you before that you may make an offer of proof at any time, and if I find that I am incorrect I will reverse myself.

Mr. Maguire: Thank you, your Honor.

Mr. Cunningham: Thank you, your Honor. I will continue with the reading of the answer which relates to the book. You have it in front of you, I think Page 228.

Mr. Byron: Well, that will be before the Court only, as I understand it.

The Court: Yes; just go to 229 and new questions by Mr. Cunningham, "I now show you, Mr. Potter——"

(Deposition of Thomas Irving Potter.)

"Mr. Cunningham: Q. I now show you, Mr. Potter, a publication entitled 'Potter Service Manual, 1938,' with the date 1939 written in ink below it, and ask you to identify that, if you can.

A. That was the Service Manual of the Potter Refrigerator Company in Buffalo. It was used by the dealers and the servicemen.

Q. When? Was it about the dates that appear there?

A. Yes, this is published in 1938 and for the 1938 line, [274] but there were no changes between the '38 and '39 lines, so this was not revised for '39."

Mr. Cunningham: I offer that in evidence as Plaintiff's Exhibit 3-GGG.

The Court: Has that been admitted already?

Mr. Cunningham: No, sir.

The Court: Is there any objection?

Mr. Ramsey: No objection.

The Court: It may be admitted.

(Manual, "Potter Service Manual, 1938," previously marked Plaintiff's Exhibit 3-GGG, was received in evidence.)

"Mr. Cunningham: Q. I now show you a series of exhibits that were identified in the Bommer deposition in this case. The same numbers were used to identify those exhibits as were used in the Stewart-Warner record. They are——"

This is a little confusing to read, it seems to me, because we have different exhibit numbers.

(Deposition of Thomas Irving Potter.)

The Court: Mr. Cunningham, why don't you substitute the new exhibit numbers when you ask the question?

(Discussion off the record.)

Mr. Cheatham: Exhibits 3-L, 3-M, 3-N, 3-O, 3-P, 3-Q, 3-R, 3-S, 3-T, in this proceeding.

"Mr. Cunningham: Q. I now show you a series of exhibits [275] that were identified in the Bommer deposition in this case. * * * Can you identify each of those, Mr. Potter? Just state briefly what they are.

A. This was sales literature. Do you want me to identify them by numbers?

Mr. Cunningham: Were they all put out by the Potter Company?

The Witness: Yes, Potter Company first went under the name of Tricold Refrigerator Company. This one in front of me is marked Tricold.

Q. Will you look through the entire group of them and let me know——

A. The next one that I come to is marked 1933. That illustrates one of our boxes. It is marked Potter and also Tricold. That is before the change of name.

Q. Just let us know if you can identify each one of them and then they will speak for themselves, I think.

A. All right, this one I recognize is what we called in our office the Gold folder. It was a sales circular showing the different models. Here is an-

(Deposition of Thomas Irving Potter.)

other one of the same type of sales literature, also Gold. Here is still another one marked 1936, same thing, sales literature showing the models. Here is another one marked 1937 showing the models for that year. Here is still another one marked 1937, showing the models for that year. Here is still another one [276] marked 1938, showing that year's models. Also, same type of literature showing the models for 1939. Those were all Potter boxes.

Q. Still on yesterday's memorandum I notice opposite——"

The Court: Have those been offered, Mr. Cunningham?

Mr. Cunningham: Well, your Honor, we expect to offer them in the Bommer deposition. I wonder if it would be clear if we offered them the first time they were mentioned? I think there is no objection to it.

The Court: They may be admitted—you are not objecting to anything in connection with the history of the invention if it relates to Potter Company?

Mr. Byron: That is right, your Honor.

The Court: It may be admitted. Do you want to read it to the jury now or show them anything, or do you want to do that at a later time?

Mr. Cunningham: I think we will make more progress if we go right ahead and can show it later.

The Court: That is perfectly all right, and it is under our stipulation. Page 231 near the bottom of the page, Mr. Cunningham.

(Deposition of Thomas Irving Potter.)

"Mr. Cunningham: Q. Still on yesterday's memorandum I notice opposite October, 1931, a notation of Anderson Patent No. 1,039,051 purchased October 29. That is quoted 'Anderson to October 29.' Will you tell us briefly—— [277]

The Witness: What is that date?

Mr. Cunningham: Opposite October, 1931.

Tell us briefly who purchased that patent?

A. I purchased that patent, personally, from the company that owned it, and they were in Chicago. I never am certain about names, but I believe the man I purchased it from was a Mr. Reese. I am not certain about that, but I merely think that is the man I bought it from. But we had developed our first Potter machine and we used a particular circuit, refrigerating circuit, in their construction. The circuit was very simple. And the way we us it it was very successful. After I moved to Buffalo it came to our attention, I believe, through a patent lawyer, the existence of this Anderson patent. That did not cover what we were doing, except it did cover part of what we were doing and that is the type of circuit we were using.

I then had the choice of redesigning the box to use another circuit or to purchase the Anderson patent.

I would not have gone ahead utilizing the Anderson patent and ignoring it. I took it up and found out—I have forgotten how I found out who the owner was—but I know I found out, and I took it up with them and they offered to sell that patent

(Deposition of Thomas Irving Potter.)

for $5,000. I figured it was cheaper to buy that patent and therefore not infringe it. It was cheaper to do that than to redesign the circuit we were [278] using, and that would have caused delays in our production plans. So we bought the Anderson patent and proceeded and continued to use that circuit.

Q. Where did you get the money to buy the Anderson patent?"

Mr. Byron: Now, if your Honor please——

The Court: Objection sustained.

"Mr. Cunningham: Q. Now, Mr. Potter, I notice a gap between your memorandum of yesterday and the first entry of the memorandum of today. The last one was November, 1932, and the first entry on today's memorandum is early 1935.

A. Yes, sir. I made no notes on those dates, because I did not think that there was anything of particular significance as applied to this present controversy. I may have been wrong, but, as I remember it, I did not remember anything during those dates that had significance. During those dates we were devoting all of our time and attention to the best of our ability to the marketing of our boxes, establishing dealers, training dealers, and so forth, and so on.

Q. Did you or did you not become aware of any competition in these two-temperature refrigerators?

A. The first competition that I remember of or about at this time—and when I say 'competition' I mean of our type.

(Deposition of Thomas Irving Potter.)

Mr. Cunningham: That is what I mean. [279]

A. (Continued): We had terrific competition commercially, because we had something entirely different than the other people. We were offering moist cold preservation. We were offering frozen food storage, offering faster freezing, and so forth. None of the others had anything of that type on the market, and as a consequence in order to meet or to beat us, that competition was very vicious. I don't believe that from the patent standpoint—maybe I shouldn't volunteer this. I will pass that.

Q. May I ask, what was the first make of refrigerator that made any effort to offer moist cold that came to your attention?

A. The first competition of our type of refrigeration came to our attention when the Kelvinator Company brought out a two-compartment, two-temperature box, and they advertised that as a very special de luxe Kelvinator with all these features.

Q. About how long did that last?

A. That lasted a very short time. As soon as I came out, I went up to Detroit and called on Mr. Mason, the President of the Kelvinator Company. I asked him to see his boxes. I had seen the announcement, but not the boxes.

He took me out into one part of his plant and showed me the boxes. They were all lined up on the wall in their big assembly hall. They had them for the dealers' [280] convention. He showed them to me, and I looked them over. I told him this, after looking them over——"

(Deposition of Thomas Irving Potter.)

Mr. Byron: I object to the conversation.

The Court: Objection sustained.

"Mr. Cunningham: Q. What was the result of this visit?

A. I saw and inspected his full line of this full-compartment type, and I criticized them very severely and told Mr. Mason that as long as he was going to come into that field in one way I was glad, because there would be more people selling our principle, but that I didn't feel that what he had would be commercially satisfactory, because the frozen storage he provided was too small. It wouldn't even hold a turkey or a big roast. I told him—I said, 'It is too bad that you didn't come to me as long as you were going into this field. It is too bad you didn't come and get my advice so that you would put out a proper box.'

We had further discussion, but we bought one of those boxes. We brought it to Buffalo, put it into our laboratory and found that they had made a grievous mistake in their design, because they had a frozen storage compartment operating well below freezing. They used paper insulation and the machine had been running for a while and then shut off; when it was running, it would collect frost around the liner. When it shut down, that frost mounted. After a [281] few operations we opened it up and we found that the insulation in that was thoroughly saturated and had gone soggy and was ruined. And shortly after that the Kelvinator Company withdrew that box from the market.

(Deposition of Thomas Irving Potter.)

I believe—and I can't swear to the accuracy of this—but I believe that that was somewheres in 1936 that they brought that box out. I think they took it off the market in 1937.

Q. At the time of this conversation with Mr. Mason do you recall whether or not your original of the patent in suit issued—the date was October 6, 1936—the answer is, I suppose, that it had not.

A. The date of issue—am I wrong? Wasn't that issued——

Mr. Cunningham: October 6, 1936.

A. (Continued): Then this, I know, was before our patent issued.

Mr. Cunningham: There is no charge of patent infringement here.

A. (Continued): It must have been in the spring of 1936 that I called on Mr. Mason. I know that they took it off the market in 1937. I can make guesses as to why, but I am not doing that.

Q. Good. Now, Mr. Potter, what was the next competition of this moist cold type that you recall?

A. The next competition was Stewart-Warner, as I recall it. [282]

Q. What, if anything, did you do about that or attempt to do?

A. Before they brought out in the market competing boxes, Mr. D'Olive came to my office with Winter Hull. Mr. Winter Hull was the chief engineer for the Rex Manufacturing Company who were

(Deposition of Thomas Irving Potter.)

building our cabinets. Mr. Winter Hull also built cabinets for Stewart-Warner.

Q. Was this before Stewart-Warner had brought out a moist cold box? A. Yes.

Q. Continue.

A. Winter Hull was using a Potter box in his home, and he was terrifically enthused over it. Several times when I was at the factory, he said that he would like to interest other manufacturers. At that time he told me that they were building a large number of boxes for Stewart-Warner——"

Mr. Byron: Object to that as hearsay, "He told me."

Mr. Cunningham: We have agreed that this motion to strike is to go out.

The Court: What did you say?

Mr. Cunningham: We have agreed that the motion to strike should go out, that they are withdrawing that motion. The motion appears on the bottom of Page 237.

Mr. Byron: Well, I am objecting now to its going in [283] because it is pure hearsay.

The Court: This is a good time to take our recess, and we will discuss that now. Ladies and Gentlemen, we will take our afternoon recess at this time, fifteen minutes.

(Thereupon, the jury retired for the afternoon recess.)

The Court: I think Mr. Maguire wanted to make

some statement here. He is not here. What do you claim for this testimony, Mr. Cunningham?

Mr. Cunningham: You mean this precise hearsay statement?

The Court: Yes.

Mr. Cunningham: Well, your Honor, I suppose it relates to the last part here, "Mr. Hull came to my office and brought D'Olive with him and they both stated——"

The Court: I want to go further, and I have listened to this testimony, much of it that has come in on Potter's deposition, and for the life of me I cannot understand the relevancy of the fact that they went up to Jewett Refrigerator Company and talked about having built some refrigerators and then no contract was entered into, and then they go up to Rex. I don't know what has happened as far as Rex is concerned. Then there is testimony with reference to Kelvinator, "Kelvinator's box is no good." Now, how many cases are we going to try here, and what possible relevancy is the fact that here, and what possible relevancy is the fact [284] that Mr. Potter went and talked to the Kelvinator people, and their box was no good? How does that establish the validity or invalidity of this box? All this drivel that is coming into this case, no objection to it, I have not said anything before, but it seems to me that this testimony, much of it, should go out of this case. [285]

Mr. Cunningham: Your Honor, I think it is a subject that could be made, perhaps, much clearer by a little memorandum or brief. However, it is

very striking to me. It's the first time in my life that I have ever had it questioned that the history of an invention, the trials and tribulations of the inventors both before the invention was made and after it was brought on the market isn't the firmest guidepost to a Court and jury as to whether or not it was more than ordinary skill. It is one of the finest, firmest landmarks in our patent law.

I think I can quote just from the Supreme Court alone on that. I am not prepared to do so at the mert, though. But it is directed squarely in response and in rebuttal of this defense of lack of invention. In other words, it is not beyond just the ordinary skill. And judge after judge after judge, case after case after case has admittedly exactly this type of testimony and that, your Honor, seems to me that you have some idea that we are trying to try more than one case at a time, but we are definitely not, because we have mentioned the name Stewart-Warner or Kelvinator, because those are all factors in this case.

The Court: And you think the fact that Mr. Potter went to the Kelvinator factory and looked over their box and accused them of not making a good box is part of the [286] history of this patent and shows patentability?

Mr. Cunningham: As your Honor states it, but I think the fact that when they saw his invention as it was embodied in his boxes and decided to copy it or to approximate it, at least that shows very cogently and very significantly the impact of that invention on the art.

The Court: And how about his conversation with the Jewett people and the lawyer imposing conditions that they couldn't meet and therefore they didn't go through with the contract? Is that part of the history of the invention?

Mr. Cunningham: Yes, your Honor, and of his activities in connection with the pioneering of this idea. He did more than just patent it, he pioneered it, and that is the most cogent, significant type of evidence you can have in a patent suit.

The Court: Let me see a decision to that effect.

Mr. Cunningham: I would be glad to, sir. I will say I am not prepared at the moment, though.

Mr. Byron: Then, your Honor, this story they are about to tell is about Stewart-Warner. Mr. Hull introduces somebody to somebody in Stewart-Warner and they have a talk, and finally Potter encourages them to take a couple of these Potter refrigerators and test them. Well, they were tested.

In the meantime Stewart-Warner asked to see the patent application of the patent in suit—the apparent [287] patent—and that was refused by Potter. So Stewart-Warner says, "Well, we are not going to buy a license here unless we know what we are buying." Potter said, "Well, I refuse to show you." Negotiations were dropped.

Now, what has that got to do with this suit?

The Court: Did you make an objection to that?

Mr. Byron: I have objected to Stewart-Warner all the way through, every bit of it.

The Court: Go ahead, Mr. Maguire.

Mr. Maguire: Well, your Honor, the history of

inventions, the state of the art, is not limited to the state which existed prior to its application. It is not limited to the time that the inventive concept has been reduced to practice. Whether it is an invention or not and what was the state of the art and the impact of this concept reduced to practice is a part of the history of the invention.

You just can't say it starts here and stops at this particular point.

The Court: Mr. Maguire, I have been in this case now for five years, or four years.

Mr. Maguire: Yes, sir.

The Court: And I have asked time and time again what this invention is, and I have never been told what the invention is. Certainly it's not a two-temperature refrigerator that they are claiming the invention on, and the fact that [288] people who after the two-temperature refrigerator came on the market used it as a freezing unit and bought meats wholesale, that can't be used by Potter because he has a monopoly on the whole theory of two-temperature refrigerators.

Mr. Maguire: Not on the temperature. It's not a question of the theory of it.

The Court: Or on the practice of two-temperature refrigerators, I will go that far. Anderson is before that but he is not claiming on Anderson because Anderson has expired, but there is a two-temperature refrigerator that preceded him.

Mr. Maguire: Upon the question of whether there is in fact, a two-temperature, I think there will be some dispute on the evidence, your Honor.

But the question of an impact of a new combination or idea upon the art and what those who are engaged in practicing the art did with respect to that kind of a disclosure is always a part.

The Court: That is a general statement, and that's absolutely right, Mr. Maguire.

Mr. Maguire: All right.

The Court: But that doesn't mean, does it, that the testimony is admissible that Jewett was a good, respectable outfit making commercial refrigerators and refrigerators for rich people, and then Mr. Potter went over there and talked about designing of a new box for him and then an attorney [289] who imposed conditions drew up a contract and submitted it to Mr. Potter which was unsatisfactory? How does that have anything to do with commercial success?

Mr. Maguire: If your Honor will permit me just a moment. I know your Honor is not in a position to advocate this case.

The Court: No. But I am trying to keep this record clear.

Mr. Maguire: Of course. That's your Honor's duty, and it is our duty on both sides to see that it does not become unclear or muddled or lead your Honor into error. That's the impression that we have, that responsibility is on both sides. But it isn't a question of whether Jewett is respectable, it isn't a question of whether or not in that particular whether or not the particular lawyer imposed—Jewett's lawyer imposed terms that Potter didn't

like, but it also was the proposition as to his attempt to get this into manufacture because——

The Court: Is that important, as to a date? Are you claiming that is the date of reduction to——

Mr. Maguire: Oh, no.

Mr. Cunningham: No.

The Court: Well, then, what relevancy has it got? I don't understand that.

Mr. Maguire: One of the things they are claiming, one [290] of the defenses is that this is an inoperable thing and nobody paid any attention to it.

The Court: Well, does the Jewett conversation show that it is operable?

Mr. Maguire: It is part of the step. You can't put all your testimony on in one piece of evidence. If that's so, why, we would only have to have——

The Court: I know that. But here is a whole line of evidence from the beginning to the end that doesn't prove or tend to prove any issue in this case. That's what I am concerned about. And I am not only concerned about the plaintiff reading it; I am wondering where the defendant is that permits the testimony of this kind to come into a case when it has no relevancy at all.

Mr. Maguire: Well, I would say, your Honor, with all due respect that there is always a possibility——

The Court: That I am mistaken? I know.

Mr. Maguire: No, don't take it that way, please. There is always a possibility that counsel on both sides have had the opportunity to study this case over the months and years and if there is some ob-

jection it's quite possible that they think that it does have relevancy.

The Court: Yes. But apparently now Mr. Byron has changed his mind after he listened to this testimony.

Mr. Maguire: Well, see, it's taken him a good many [291] months to change his mind.

Mr. Byron: No. I object. The very first day of the Stewart-Warner I said it had nothing to do with it and the paramount effort here by the plaintiff is to try to connect up Stewart-Warner and Admiral trying to, for some purpose, place the onus on Admiral for some reason which I do not know. And there is no relevancy, no pertinency, no materiality in any of the Stewart-Warner testimony or any of their negotiations or failure in the negotiations.

I have said from the very beginning I want to keep Stewart-Warner out completely, and I have said it on the record completely and I say it now, and I stick to it.

Mr. Maguire: Well, your Honor, evidently both of us are under a misapprehension. Evidently they are objecting.

The Court: Oh, I knew that he was objecting strenuously to Stewart-Warner. He has been telling me that from the first day he came into court.

Mr. Maguire: That was the question of what happened to litigation of Stewart-Warner.

Mr. Byron: No; everything about Stewart-Warner.

Mr. Maguire: Well, this is the first time I have heard of that.

The Court: Oh, I think, as I have looked over this deposition, I have seen that both he and Mr. Byron and Mr. Cunningham were apparently agreed that the name of [292] Stewart-Warner should go out, and many times when I didn't think it was prejudicial at all. He takes a much more strict point of view than I do because I have come to the conclusion that you can't keep out the Stewart-Warner case, and I have said so time and again, and I think it's just folly to strike the name Stewart-Warner time and again in exhibits because these people know that there is a Stewart-Warner case, and I told them that there was a Stewart-Warner case.

But that doesn't alter the situation, and I think that the negotiations between Mr. Potter and the Stewart-Warner people have no relevancy to this case at all and I have stated time and again that I think we have enough here.

Mr. Cunningham: If your Honor please——

The Court: I think we have enough here to try one case.

Mr. Cunningham: I have found a quotation from one case in the Second Circuit. I just happened to have it with me. It is Bresnick against U. S. Vitamin. There the patent was held invalid and I don't know——

The Court: What are the facts of the case?

Mr. Cunningham: I don't know, sir. Let's see——

The Court: Well, I will tell you this, Mr. Cunningham——

Mr. Cunningham: May I just quote some language?

The Court: Tell me the facts of the case.

Mr. Cunningham: Well, I—— [293]

The Court: I want to say this at this time, that in this court language doesn't mean anything because I say a lot of things. I want to know what the facts of a case are because what Mr. Maguire quoted as general law I agree with.

Apply it down to a similar case. Let's see what the facts are before we determine whether the case is applicable.

Mr. Cunningham: Your Honor doesn't care to hear this language?

The Court: Have you ever read the case before?

Mr. Cunningham: Yes, your Honor.

The Court: Tell me what the facts are, Mr. Cunningham.

Mr. Cunningham: I do not now recall them, but I will give you the citation.

The Court: All right.

Mr. Cunningham: I do have in mind one fact, and that is that the patent in that case was held invalid. 139 Fed. (2d) 239. And the language I intended to quote but will refrain from doing so is on page 231.

The Court: All right.

Mr. Cunningham: That is certainly not offered by me as squarely in point on it. The patent there was held invalid and obviously was invalid. And

if you want, your Honor, to look at a more considered list of cases on this point, it shouldn't be too difficult—it's very well known [294] and I'm surprised that we met any objection here.

Go way back to the Carnegie vs. Cambria, 185 U.S. 403, the language at 429. Smith against Goodyear, 93 U.S. 486.

The Court: 93 U.S.——

Mr. Cunningham: 486.

The Court: 486.

Mr. Cunningham: Case, 143 U.S. 275.

The Court: What are the facts of this one in 93 U.S. 486?

Mr. Cunningham: I can give you a summary that I have here.

The Court: Mr. Cunningham, what I would like in brief is not language, as I have told you.

Mr. Cunningham: I am not going—there are no quotations, your Honor. To start with, the Carnegie vs. Cambria:

> "The Court spoke of the common history of important inventions, the simplicity of which seems to be the ordinary observer to preclude the possibility of their involving an exercise of the inventive faculty."

The Court: Well, perhaps I will be able better to follow the testimony. Mr. Cunningham, will you at this time tell me what you claim for the invention? What is the invention? I asked you that before when the jury was here. Maybe you want to tell me now what the invention was. [295]

Mr. Cunningham: Well, your Honor, I tried to do so in my opening statement, and unfortunately I think I have left the language I used at home, and perhaps I could tell you better if I could find it. Let's see—yes. But, of course, a short answer, and I think it may be an adequate one, it's the combination of the elements as defined in the claims of the patent.

Now, those are eight or ten in number, depending upon the claim. There will be no difficulty about them. They define a structure which is new, which is not, of course, shown in the Anderson patent.

The Court: Which is not what?

Mr. Cunningham: Which is not shown in the Anderson patent of 1918 which was 14 or 15 years before Potter, in which the Patent Office in the Stewart-Warner court and everybody else knew all about and allowed the Potter patent.

It's true that the Anderson patent had a compressor and two compartments. There is no dispute about that.

The Court: Mr. Cunningham, I just asked you a simple question, "What is the invention?" and you are telling me the invention is that which is defined by the claims, the patent. I know that. But I mean, what is it? Tell me in simple language what do you claim for your invention? What is the new and novel portion of your invention? [296]

Mr. Cunningham: The new and novel combination was in short, and very inadequately might be summed up in this way—and this, of course, is a

paraphrase of the claimed elements which are a much better definition—it was having in a household refrigerator which in normal operation provides above freezing moist cold air for preserving fresh foods and also providing storage facilities for frozen foods in the one cabinet.

The Court: All right. We will stop right there. Are you claiming an invention on that up to there, a two-temperature refrigerator?

Mr. Cunningham: That, your Honor, was the setting for the invention.

The Court: Yes.

Mr. Cunningham: Now, the elements——

The Court: Well, there won't be any mistake. You are not claiming an invention on having in one box a cooling chamber and a deep freeze or a freezing——

Mr. Cunningham: We are not disclaiming that as part of the invention but that is not by any means an adequate description of the invention.

The Court: Fine. So in other words, up to that point is there anything new and novel, do you claim, about a refrigerator in one box that has a cooling compartment and a freezing compartment? [297]

Mr. Cunningham: With moist cold air?

The Court: Just leave out the "moist cold air." Now——

Mr. Cunningham: You mean just have two-temperature boxes?

The Court: Yes.

Mr. Cunningham: No, I don't think that's——

The Court: You couldn't have gotten a patent on that, could you?

Mr. Cunningham: Not at the date of this patent.

The Court: That's right. Now, in other words, the one box with a compartment, one for cooling, and one for freezing, and the third one for ice cubes, there is no invention there at this time?

Mr. Cunningham: Of course, I have in mind when I say that the Anderson patent, and I can't keep all the art in my mind. I would say that that had two compartments, the one down at the lower right-hand side was for freezing ice cubes, anyway, and at lower temperature than the one above. That is, as I understand, the actual patent. Two temperatures, yes, that is older.

The Court: Two or three temperatures is old in the art. And, anyway, it would be an aggregation of elements?

Mr. Cunningham: Oh, no, sir.

The Court: It wouldn't be in aggregation of elements to have two temperatures in one [298] box?

Mr. Cunningham: Oh, no.

The Court: All right.

Mr. Cunningham: I don't think it's ever that simple, your Honor. Aggregation is one of the rarest of defenses.

The Court: I thought that that would be a classic example but maybe I am mistaken.

All right. Now, you don't claim an invention on the two-temperature box, but then when you put moist air, is that your invention?

Mr. Cunningham: In combination with the other elements I think that is a point of departure from what was prior. I think it answered a need that hadn't been filled in household refrigerators.

The Court: Is the moist air one of the elements or is it a result? That's what I would like to know now.

Mr. Cunningham: The moist air?

The Court: Yes. You are claiming it's new, two temperatures with moist air. Is that a result you attained or a means?

Mr. Cunningham: Well, it's a means. It's an element of combination. It's an operative element of the mechanism.

The Court: And that's one of the new elements introduced in your invention?

Mr. Cunningham: And I don't mean that Potter invented air or even moist air, but it certainly is an operative element of his combination. [299]

The Court: Moist air is an operative element. What are the other operative elements?

Mr. Cunningham: Well, some of the others—and you don't want me to read the whole claim——

The Court: No. Just tell me. You have been living with this patent for a long time, you ought to know.

Mr. Cunningham: There is the compressor-condenser, receiver element—that's the liquefying unit, that is called, as I recall it——

The Court: Then there is the liquefying unit.

Mr. Cunningham: Then there is, of course, your expansion valve in the line and the refrigerant

through those, and then before we come to the primary or freezing coil you have this expansion valve which is, of course—cooperates with the rest of the organization including the thermostat, and keeps the balance between the cooling expander and the freezing expander. You have as an element your thermostat and it exercises a control and the operation of the thermostat is an element of the invention the way it's positioned and arranged.

The Court: Well, how is that? Tell me that. Tell me how that thermostat is arranged and how it operates.

Mr. Cunningham: Well, that, you have a thermostat sensing the temperature in the specified compartment and a—the specification, I believe is a little broader in Claims 1 [300] and 2 than it is in Claims 3 and 4. I didn't quite finish——

The Court: Mr. Cunningham, I don't want to be captious about this thing, but I have a responsibility here and I certainly ought to know what you are claiming in order to be better able to follow the testimony. How will I know whether you have proved the case unless I understand, and that's precisely the reason I have asked you time and again about this. Maybe I shouldn't have asked you in the presence of the jury before, but I would like to know now, and that might help me to determine what testimony is admissible.

Mr. Cunningham: Well, have I failed to answer your question?

Mr. Maguire: Just a moment. Your Honor, I

wonder if we could have about five minutes with consultation amongst counsel?

The Court: Fine. You can have more than that and let's thrash this thing out and I will appreciate it very much if you will just tell me what the invention is.

Now, I might for your edification and your information tell you that I haven't found out yet and I would like to find out which of these elements mentioned by Mr. Cunningham represents his invention, whether they are anything new in the art, and what result was accomplished by this invention which is an advance in the art. That's what I am trying to find out. [301]

Mr. Maguire: Now, I think perhaps we could certainly in this conference try to iron that thing out so that I think we can give your Honor what you want. I understand what your Honor has in mind and if we could have about five or ten minutes I believe we can provide it for you.

The Court: I will just tell you one other thing, and that's the reason I am doing it. I have been up against the proposition of determining what testimony is admissible, what is relevant, and I don't believe that you can come in and bring in evidence of the commercial success of two-temperature refrigerators or the commercial success of some of your competitors, but it seems to me that commercial success is tied down definitely to the patentable features of your invention. That's the reason why I want to know what are the patentable features of your invention.

Mr. Maguire: If I may paraphrase that——

The Court: I didn't ask you to answer me. I just want you to know.

Mr. Maguire: I just tried to see if I clearly understand your Honor. What I take it your Honor has in mind, if I may paraphrase your inquiries, is what things and what elements did the patent combine whereby they brought about a new, different, or better result than had theretofore existed.

The Court: That's right. [302]

Mr. Maguire. All right. Now I understand.

The Court: I want to know what you claim as the means and what you claim to be the results, the means comprising the result.

Mr. Maguire: I think if we can have a little conference we can iron that out.

The Court: Recess for ten minutes.

Mr. Maguire: Thank you, sir.

(Recess.) [303]

Mr. Cunningham: We have come to what we think is perhaps the answer, at least it seems to me the only answer, the only honest and forthright answer I can give you. I would be glad to point out to you each of the elements of the combination. You see, it has been our position from the beginning that there is no particular element that is the invention. It is the combination of all and that all of the elements coact to make this unitary combination which gives new and improved result.

The Court: Not new result; just an improved result, isn't it?

Mr. Cunningham: I think it is—well, I would call it a wholly new result, your Honor. I know that the Court of Appeals in the Seventh Circuit used the word "improved," and that is a matter of language, perhaps, but I would be glad to point out the eight or ten elements in, let us say, the shortest claim or the broadest claim is a better word, say Claim 2, and if your Honor has the patent in front of you I will shorten that a little, and you can follow it.

The Court: Go ahead.

Mr. Cunningham: I have a copy here, sir, if you want it.

The Court: I would appreciate it very much. If you are using it, go ahead. [304]

Mr. Cunningham: No, sir; I have another. May I pass this up? (Presenting document.)

Before beginning, your Honor, I point out that I select Claim 2 merely because it contains, I believe, the fewest number of elements and is therefore the broadest claim. You will understand—well, I will say Claims 1 and 2—they are broader than Claims 3 and 4.

Mr. Byron: No; what I meant to say was merely because it was shorter is no reason it was broader.

The Court: I think, Mr. Byron, Mr. Cunningham ought to be permitted to make his own statement.

Mr. Byron: I am sorry.

The Court: I am waiting for this occasion. I have been waiting for a long time, and I am just going to take full advantage of it.

Mr. Cunningham: Now, sir, if you will look, Claim 2 is at the bottom of Page 6.

The Court: I see it.

Mr. Cunningham: You will find there somewhere the word "comprising," and it is down in Line 65. Now, if your Honor will just make a mark there——

The Court: I have got it.

Mr. Cunningham: Everything up to that point we characterize as preamble or setting. It is part of the claim, but the word "comprising" is quite a usual word to [305] designate an enumeration of elements in a combination claim like this.

The Court: Go ahead.

Mr. Cunningham: So it does have, of course, the focusing function that it is in a household refrigerator, you understand that. That is the preamble of the claim. Now, sir, I will read from the claim 2, and this is Element 1:

"* * * a cabinet having a cooling compartment and a freezing compartment, thermal insulation around said compartments thermally insulating said compartments from each other and from the outside atmosphere."

The Court: As I understand it, you do not claim that any one of those elements is new?

Mr. Cunningham: Oh, no, sir. We admit that they are not.

The Court: Very well.

Mr. Cunningham: You see, it is the combination that is the invention, of these old elements, admittedly old elements.

Now: "* * * a cooling refrigerant expander——"

The Court: Yes.

Mr. Cunningham: You might separate, and you will see— [306] "a freezing refrigerant expander —" Now, sir, I am not reading the patent.

The Court: That is all right.

Mr. Cunningham: "A single liquefying unit associated with said expanders." That is the fourth element.

"* * * a freezing refrigerant expander having heat-conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature well below 32 degrees F. while withdrawing heat from said compartment whereby air in said freezing compartment is cooled to a temperature well below 32 degrees F."

That is another element, and here is its corollary:

"* * * a cooling refrigerant expander having heat-conducting surfaces in said cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees F."

Next element:

"* * * a single liquefying unit associated with said expanders and expanded by heat [307] extracted from both said compartments, the volatile

refrigerant circulating through said expanders being the sole heat-extracting medium."

Now, sir, that was the shortest claim and, I believe, the broadest. You will notice that it has reference to claims when—because there is a little difference and a very slight difference in the language of Claim 1 with respect to the air, the way that is defined. It is set forth as a positive element in Claim 1, but, otherwise, the claim, as I recall it—I am not checking it now—is substantially the same as the combination of Claim 2.

The Court: What is your invention?

Mr. Cunningham: The combination, sir.

The Court: What is new and surprising, what is the new and surprising result that it creates? What does it do?

Mr. Cunningham: It gave to the world for the first time in a household refrigerator——

The Court: Now I am going to take down what you say. Give me the elements—1, 2, 3—that are new and surprising or different.

Mr. Cunningham: These are the elements, your Honor, the results.

The Court: Results?

Mr. Cunningham: This is what was [308] achieved.

The Court: What was achieved? Give me No. 1

Mr. Cunningham: I am giving you this on the cuff because our patent is a published document. It is our position that nobody skilled in the art should have any difficulty understanding what the results were, what they sought to do and what they got.

and I will say that it was providing for the first time in the history of the world in one cabinet, household refrigerator, two compartments; one in which it made a climate, proper moist humid climate was maintained for the storage of fresh foods to prevent dehydration, the other in which a proper climate or atmosphere was provided for the storage of frozen foods, and that latter compartment containing a, possibly a sub-compartment or, integral therewith, a little chamber for the freezing of ice cubes.

Now, I do not believe any refrigerator prior to the date of the invention of the Potter patent provided that.

The Court: I am going to try to interpolate——

Mr. Cunningham: With a single liquefying unit.

The Court: Yes, all right. As I understand it, you claim your invention to be these various elements which you read?

Mr. Cunningham: No, sir.

The Court: Wait a minute. [309]

Mr. Cunningham: We claim the invention to be a combination of these elements.

The Court: The various elements in combination which produced the following result: A two-temperature refrigerator in one box, one chamber which is a cooling compartment, the other chamber which is a freezing compartment, and in that second chamber you have a third small chamber which produces ice. I also assume from what you said

before that together with the fact that, I assume, in the cooling compartment there is moist cold.

Mr. Cunningham: Yes, your Honor.

The Court: You claim an invention on that?

Mr. Cunningham: Now we do not say that our particular invention is the only way of getting that result. We do say that we get it by the means we disclose and that we were first. We do not say that there cannot be an element and not later might be other ways of getting those results so it is wrong to define the invention by the results. The only way you can define the invention is by the structural elements of the combination, none of which are new.

The Court: Let me see if I understand you now. You claim that no element which in combination produces this result is new in the art: they are old in the art?

Mr. Cunningham: All of the elements of the combination are old. The invention is the combination. [310]

The Court: And that these old elements combined to produce a new result or an improved result?

Mr. Cunningham: That is correct, sir.

The Court: And that this is only one combination that produces that same result. There are probably other combinations that produce identical results?

Mr. Cunningham: Actually, I happen to believe that it was the first to produce the result. It does not really make any difference if the result had been gotten by other means at an earlier date be-

cause our invention is the combination. I do not think, however, there was any. I know of none, and, certainly, the Anderson patent was not one.

The Court: Now, from our conversations previously we mentioned a number of other boxes. For instance, I think you mentioned the Philco box which is an infringement on this cabinet.

Mr. Cunningham: Your Honor, could we go off the record on Philco?

The Court: Yes, go off the record. Give me another, another box that you say does not infringe the two-temperature box.

Mr. Cunningham: Well, isn't this adequate: I will admit that there must be many makes of household refrigerators that do not infringe the claims of this patent. I know that [311] is the fact. They may not get the same results.

The Court: Now we are getting down to the very crux of the problem which has been plaguing me. If that is true, and if other companies have manufactured boxes which achieve the same result —that is, a freezing compartment and a cooling compartment—why, then, is it relevant to say that, in the history of the patent, that a woman goes down and buys 60 pounds of meat and 30 pounds of berries and some hors d'oeuvres and puts them in this freezing compartment and when she decides that she is giving a party she takes it out, defrosts it, and everybody is happy, and it is just wonderful? Now, why is it that this evidence that you propose to submit, why is it peculiar to the Potter pat-

ent? Isn't that a general condition in the market which is available to all of the whole industry?

Mr. Cunningham: Your Honor, I think I see, I hope I see what is troubling you, and I think I understand. This testimony will be tied in with refrigerators that were made under the Potter patent, you understand that, and that did embody the invention of the Potter patent. Now, I do not think, and I do not even know or even consider whether that Kelvinator box infringed the patent. I do not know what it was, and it is very possible that people could devise non-infringing structures, but the point of [312] the testimony, and I think we are talking about testimony that we have in mind here, is to show what happened when this box which obviously did embody the invention hit the commercial market. It does not make any difference, just the fact that somebody else would approximate it even though they did not infringe or embody the invention is some evidence, and, your Honor, in some of those cases that I am sure I can cite to you it is a most helpful guidepost because judges like yourself have had no experience in the refrigeration art, and you want to know what happened, and let me at the risk of being a little facetious quote a remark of a very dear friend of mine, a patent lawyer. I think he may have been a little facetious, but he kept saying things frequently become patentable long after they are patented, and what he meant was that it was not recognized when that is what happened.

For instance, in the Dupont Duco lacquer case

the testimony there that I recall very well was that the invention had revolutionized automobile finishing, your finishes outlasted the life of your car after Duco. Before that you had to have your car repainted every year. Now it is that sort of thing, you see, that is quite a help and aid to any Court, and I am sure all the Courts feel this way about it that I have had any contact with. They look for those aids, guideposts, in determining this very [313] difficult question of whether or not it is beyond ordinary skill because they reason that if it had not been beyond ordinary skill, if the need had lasted for a long time and not been solved and then it was solved by the advent of your invention it must be more than ordinary skill.

The Court: Mr. Cunningham, everything that Mrs. Kobernuss testified to with reference to two-temperature box is equally true to a household freezer, and I own a household freezer and I am an expert on that. I can testify to everything she said can be duplicated practically on the results for a one-temperature household refrigerator, General Electric.

Mr. Cunningham: Your Honor, her testimony is merely—and it is very plain, it seems to me—it is merely to show the impact of this particular invention which was embodied in the refrigerators that she was selling how it affected the housewife and the consuming public, the purchasing public, and this other testimony—we have it in other ways—shows the effect of it on other manufacturers. You have a little bit in the testimony here of Mr. Potter about what happened to Kelvinator, and, of

course, the long story of this invention is most helpful to your Honor and to the jury in deciding the only real question in the case. There is no real question in this case of infringement. The only real question is that of lack of [314] invention.

Mr. Byron: We object to that. There is a real question.

The Court: I noticed that all of your statements are in direct conflict with the opinion of Judge Sparks of the Seventh Circuit where he, after looking over all of these various elements which you referred to, and as you mentioned those I kept checking them off on the table appearing on Page 977—and then he after stating that they cannot view appellant's strict view of refrigerator art with such enthusiasm that there was no new combination of elements, and then they pointed out there was in appellee's alleged invention no new result, there was an allegedly improved result such as a non-frosting coil and the non-dehydration of foods, which improvement the jury verdicts established. That is the way they interpreted this decision, two elements; a non-frosting coil, a non-dehydration of foods.

Mr. Cunningham: They did not throw over the patent for that reason; it was simply an invention of a non-frosting coil.

The Court: That is right; they do not do it directly, but they mention your claims 5, 4 and 8. In connection with that they say if it were held to be valid it would cover any conceivable means hereinafter invented where the results stated were ob-

tained. I appreciate the fact that they did [315] not hold this invention invalid, and they claim that the jury's verdict established two things, a non-frosting coil and a non-dehydration of foods. That is what I was trying to find out, Mr. Cunningham. Are you claiming the same things, or are you claiming more, or are you claiming less?

Mr. Cunningham: Well, I think, your Honor, we are claiming less over the broadest claim. Now, if you are talking about a particular claim that Judge Sparks had in mind, I am sorry——

The Court: This was not in reference to any particular claim. He says the jury's verdict established two things, that the invention consisted of non-frosting coil, the non-frosting coil, and, second, the non-dehydration of food. [316]

Mr. Cunningham: Of course, your Honor.

The Court: Were you claiming either of those?

Mr. Cunningham: We are claiming what I have just tried to tell you, that we have this moist cold——

The Court: I am not as hard to convince as the jury is. I don't understand all of these things. You have to talk simply to me, Mr. Cunningham.

Mr. Cunningham: I think, your Honor, by non-frosting coil he meant what I am trying to describe, a humid climate in the fresh foods compartment. For the first time it is getting away from this dehydration problem. I don't think that Judge Sparks, himself, meant that we invented any kind of a finned coil because that was obviously old.

The Court: He never said you invented the finned coil, but he——

Mr. Cunningham: He called it a non-frosting coil and that's his way of expressing it, I guess.

The Court: And you think what you outlined to me is a narrowing of the original patent, the claim to the original patent? It is a two-temperature box?

Mr. Cunningham: Your Honor, may I hand up a copy of a little analysis I happened to find in my book here comparing the broadest of the original claim of the original patent with what I consider the broadest of our claims, which is Claim 2 of the reissue? I think it will answer your question [317] and actually was the memorandum that I used when I listed the elements.

The Court: Well, can you answer this one question, Mr. Cunningham, which I think is a fair question, and which I don't think is an unintelligible question? You have outlined to me the results which you claim were achieved by these elements upon which you claim an invention, and you have told me that it's a household refrigerator in one box having one cooling compartment, one freezing compartment, and in the freezing compartment there is another compartment which is even colder for ice cubes, and that in the cooling compartment they have moist cold, and that is what you are claiming on your invention.

Mr. Cunningham: And claiming——

The Court: And the question I am asking now is do you now tell me that that is a narrowing or a broadening of the claims of the original patent?

Mr. Cunningham: You mean what I told you?

The Court: No. I would like to know that.

Mr. Cunningham: Oh, well, your Honor——

The Court: It is not a fair question?

Mr. Cunningham: Yes. And I think everything I have said applies equally to the original patent. It's neither one. And what I hope you understand is that it really is a statement of what the invention is in terms of what I think [318] was new in the commercial art at the time. The real invention is stated and can only be stated in the language of the claims. Your Honor knows that this patent was pending in the Patent Office for almost five or six years and that the whole point of that long six-year proceeding is to get claims that will define the invention. So it's a little difficult for a lawyer or—to put a lawyer or anybody on a spot to answer just from a sidewalk just what these claims are. This is a six-year process arriving at this language.

Really the only answer, the invention is defined in the claims and there are four separate definite definitions of it in our reissue patent, and that, your Honor, is the answer I have to make to your question of "What is the invention?"

The Court: Maybe that's right, but it seems to me one of the most important elements in the invention is the definiteness of the description so that a person who is not versed in the art would be able to read the elements and know what the invention is.

Well, maybe you have done it, but I think the last question I asked you was capable of answering, and, frankly, I don't think it has been answered.

Mr. Maguire: Well, I think, if, your Honor, I may speak on that one subject for a moment, I

think what your Honor [319] was talking about was the result of the combination and not the combination itself. One cannot patent results; one patents ways and means of accomplishing results.

The Court: Yes, that's true.

Mr. Maguire: You will remember the old Morse telegraph patent. They held that he was really patenting results rather than means because he claimed any kind of a way, all kinds of ways of transmitting an electric current and breaking it and making marks without specifying the way in which he did it. One doesn't patent function, one doesn't patent results, one patents devices or combinations which, when working together, bring about something new or better.

Now, on this particular thing I don't think anybody questioned that one could take a box and put in a compressor and use that compressor to bring about a deep freeze or a sharp box and have another box on it with another compressor having different —and have a temperature just above freezing. But the question is, when you have this particular kind of a combination whether or not that combination would enable you to get both of these results or all three results.

The Court: New or improved?

Mr. Maguire: Yes. Yes.

The Court: And you are claiming that this is a new and improved device which—— [320]

Mr. Maguire: It is a combination of elements which brings about a new and better or convenient result than we could get otherwise.

The Court: Well, I think I have gotten as much

information as I possibly could get on this thing. I thought that a combination of old elements should produce an improved result or a new result.

Mr. Cunningham: And it does, your Honor, in this case. You know—may I just relieve myself by quoting about five lines from an opinion. It's the language of the Court, Second Circuit, and it's just apropos of your Honor's last remark. He says, "We have repeatedly said that in the judging whether a new combination is an invention we regard the history of the art as a much greater importance than our own untutored judgment as to what advantages demand imaginative originality in specialized fields. Nothing can be less reliable than our own naive impressions based upon gross appearance."

The Court: All right. Did you want to say something?

Mr. Kolisch: Your Honor, I think you put your hand on the nub of the situation when you asked both Mr. Cunningham and Mr. Maguire, "What is the new result?" I think we all agree as a matter of patent law this is an old combination and we know that the law is that when you have an old combination you have to have a new and surprising result. [321]

Now, we still haven't heard what this result is. We keep being referred back to the claims. Well, the claims don't tell us anything and we are still waiting to find out what is the new and surprising result. That is something that if there is such a result can be defined very simply and very clearly

and it always is, and that's how these combination patents always fall.

The Court calls up and says what is the result that you produced and, if what you produced existed before there is no invention, this is not patentable. And I don't think you have got an answer. I certainly don't know and I don't think anybody in the defendants knows what the result is.

Mr. Cunningham: Your Honor, I would like to have Mr. Kolisch point out in what prior patent he gets the result that I tried to define; just one specific patent.

Mr. Kolisch: I would like to know the result, sir, so we can show him.

Mr. Cunningham: I stand on the record. I made a statement of what I thought the result was. I will challenge him to point out anything, and I have in mind the Anderson patent. There is certainly nothing closer than Anderson's, isn't that true, Mr. Kolisch?

Mr. Byron: We are not saying that.

The Court: Well, all I have got to say is that what I [322] told Mr. Maguire a few minutes ago, that patent lawyers try cases differently than any other kind of lawyers that I have ever seen, and maybe the theory is to keep the Court in the dark.

It's four-fifteen now. Do you want to start reading the deposition again, or do you think we ought to let the jury go?

Mr. Cunningham: I guess we had better let them go.

The Court: Let's let the jury come down and

maybe then we will continue with this little discussion, and I will excuse them.

(Whereupon, the jury was called into session.)

The Court: Ladies and gentlemen of the jury, during the 15-minute recess that you took we began to discuss various questions of law which was quite productive, at least, to me, on various issues of this case. Now, I don't want you to feel that every time something interesting comes up you are shifted over to the jury room and you can't hear what is going on, because that's not the case. But I think I told you earlier that you are to decide certain questions of fact and I want to tell you right now that every time any fact question comes up you will hear all the evidence. There is nothing being held back.

But many times questions arise involving law problems which are of no concern to the jury until I instruct [323] you as to what the law is. So the reason I am telling you that is sometimes jurors feel that they are being kept out of some of the most important elements of the trial. That's not true.

Now, we have certain other things to argue about and it's now four-fifteen, and I think it would be advisable if you would just retire this afternoon and maybe come back at nine-thirty tomorrow morning.

Now, in spite of the fact that we are coming back at nine-thirty, that does not mean that we are going to take a long session. We will make it a little

longer tomorrow because of this longer recess. But I want to tell you right now about one situation that has come up: On Monday we are not going to start until one o'clock in the afternoon so you won't have to report at ten o'clock or nine-forty-five in the morning. We have a situation in this Court where we are going to have four judges and three courtrooms and so I am lending this courtroom to another judge for about an hour and then I am going to take up some other matters. So we will start at one o'clock on Monday, so you don't have to come down here until Monday at one o'clock. I will remind you of that on Friday but should I happen to forget, you will know that.

You are now excused until tomorrow morning at nine-thirty. [324]

(Whereupon, the jury was excused until 9:30 Thursday, November 17, 1955.)

The Court: I would like to propound a question to Mr. Maguire. Maybe he is my kind of a lawyer. So, Mr. Maguire, I don't know, you have had a lot of experience in patent law, and you have had plenty of experience in the trial of cases, and so I want to ask you a question.

Am I incorrect in believing that where you have a combination of old elements, in order for that combination to be patentable that combination must achieve a new or improved result? Am I right or am I wrong in that statement of law?

Mr. Maguire: Well, I think we can say this, your Honor——

The Court: Now, just don't give me "this" that the witnesses do. Can you answer the question Yes or No? Isn't that a simple question?

Mr. Maguire: Well, it's not quite as simple as your Honor pleases. It is not an invention, there is no inventive factor displayed and therefore not patentable unless there be an improvement and step forward in the progress of that particular art.

The Court: All right.

Mr. Maguire: Now, but the question is this, your Honor, if I may be permitted——

The Court: All right. I will keep still. [325]

Mr. Maguire: The question is whether or not it is. That is a question of fact which the jury determines.

The Court: Wait a minute. You are just going ahead of me now. I want to ask you the next question.

Mr. Maguire: If I could answer it, your Honor.

The Court: As I understand it, you have said that for this old combination, this combination of old elements to be patentable it must achieve a new or an improved result, it must be a step forward in the art?

Mr. Cunningham: I didn't understand him to so state, your Honor.

The Court: Well, will you please tell me in simple language?

Mr. Cunningham: Go ahead, try it.

Mr. Cheatham: Old elements may be rearranged in different combinations. Mr. Kolisch says this is an old combination; it is not.

The Court: Yes. I am not worried about what Mr. Kolisch says.

Mr. Cheatham: And a new combination of old elements of itself must have been done for a new result. I think we have that here.

The Court: Now, so there won't be any mistake about that, it is your contention that a combination of old elements to achieve patentability must result in an improved or new [326] result?

Mr. Cheatham: No, I didn't say that, sir, your Honor. I said that a combination of old elements arranged in a new manner of itself and as different results in new results from the prior art. I think that we have agreed to——

The Court: What about that? What about that? A combination of old elements rearranged achieves a new result. Is that what you said?

Mr. Cheatham: Right.

The Court: All right. Now, it is your contention that these are combinations of old elements rearranged. Tell me the answer to my next question that I am going to ask you. What new or improved result did the Potter reissue patent achieve?

Mr. Cheatham: It achieved the result of giving the housewife one article of merchandise which replaced a—two old articles, one a deep freeze, the other an icebox.

The Court: Now, I thought that Mr. Maguire a few minutes ago said that he admitted that you could have in one box a freezing compartment and a cooling compartment, each with a different motor, and it would have about the same effect?

Mr. Cheatham: Certainly.

The Court: Now, if it didn't achieve for the housewife one box with two compartments—because Mr. Maguire said and we all know that instead of having one compressor they could have two compressors. [327]

Mr. Cheatham: That is right.

The Court: All right.

Mr. Cheatham: If you had old deep-freeze boxes with their own refrigeration system. You might have had, I don't know, old moist cold boxes. I don't know.

The Court: Now, Mr. Cheatham, in commercial boxes isn't it a fact that they had those cabinets with two types of refrigerators, I mean a cooling and a freezing compartment?

Mr. Cheatham: I don't know, sir.

The Court: Well, I can tell you I brought a case against the people, I think, that either made the Potter box or the Birkinwald Company on Fifth and Everett Street many, many years ago when I first started to practice law and they had a two-temperature box in a showcase there and the basis of that was that the grocer said that the meat in freezing compartment turned black and he wanted his money back and I represented him and I got his money back. So they must have had those a long time. If they had it in a commercial box the mere fact that it was put in a household refrigerator, would that be a step forward in the art?

Mr. Cheatham: You may be talking about what

would be an aggregation of tying two boxes together by bolts or with a string around them. That would not be an invention. [328]

The Court: That is right. And that is what I thought that Mr. Maguire's statement was, an aggregation, because you were the first one that ever explained that to me by a pencil and eraser; I remember that very clearly. You explained that to me as a combination of elements. That is where I got my information and that is why I used it here today on Mr. Cunningham, because you told me about that a long time ago.

Mr. Cunningham: Your Honor, I think maybe one trouble, if I could ask you a question——

The Court: Go ahead.

Mr. Cunningham: Do you think that a result is ever an invention?

The Court: No.

Mr. Cunningham: Do you think that a result is ever patentable?

The Court: No, I don't. But I think that in order for a mechanical patent or process to be patentable it must achieve a new and different result. It must be an advance in the industry.

Mr. Cunningham: It has to be new. Your Honor, here is a homey way and——

The Court: Am I incorrect in that statement?

Mr. Cunningham: Well, I think you are. I am trying [329] to answer it. Suppose I have in my hand here a marvelous little gadget; wheels go around and sparks come out and there is running water in it and it makes a noise and plays a tune

and there was never anything like it in the world, some fellow comes along and he sees that and he says, "Jeepers, that's just the result I want. Who is the inventor, the fellow who appreciates the result or the fellow who put together the novel combination? That is what Mr. Cheatham has been trying to tell you and I agree with him one hundred per cent. When the invention is a combination of admittedly old elements, that is the invention, the combination. Don't think it is a non-frosting coil as Judge Sparks did.

The Court: I don't think Judge Sparks said that, in the first place. That is not the way I read it.

Mr. Cunningham: Well, I don't think he did either, but I think he may have felt that he thought it was that.

The Court: Now, a combination of old elements rearranged which does not produce an advance in the art is not patentable in my view.

Mr. Cunningham: It could be, your Honor. It could be way ahead of itself. It could be just a brand new combination doing in a better way the same old thing that they had had for years, get the same result with a different combination. You can't patent a result. Mr. Kolisch is [330] 150 per cent wrong.

Mr. Kolisch: Your Honor, may I speak?

The Court: All right; go ahead.

Mr. Kolisch: Well, I think that Mr. Cheatham made the only frank answer to the question you have been propounding to the plaintiff right along as he did state what he understood to be the result.

You have been asking him right along, and as soon as you get down to the question, "Now, what is this result?" they knew perfectly well they have to give a result. They take you back into the claims again and they say it is this combination. Now, I don't think that anybody sitting over there will disagree with the statement that you made that in order to have a patentable invention in a combination-type claim you have got to have a new and surprising result.

Mr. Cunningham: I will say, your Honor, it helps but you don't have to have it.

Mr. Kolisch: Well, I would be very glad and I think that we could all learn something if Mr. Cunningham will now give us a case on that.

The Court: He doesn't have to do it tonight, and you don't have to do it tomorrow.

Mr. Cunningham: I won't have time, your Honor.

The Court: All right.

Mr. Cunningham: We are going to try to do it. [331]

The Court: Over the week end I would like to have that.

Now, we are going now to be getting into the Kobernuss testimony. I have told you frankly what I believe about this testimony and I don't want general statements. Mr. Maguire knows what I want and Mr. Maguire says he has some authorities. So, tomorrow morning, Mr. Maguire, will you come in about 9:15 and maybe somebody from the other side, or, they don't have to; I know what their po-

sition is. I got a letter from them. Just tell me what Mrs. Kobernuss proposes to testify to in this Court and why it is admissible.

Mr. Maguire: Well, as a matter of fact, your Honor, to be quite frank, I haven't the slightest idea what she is going to testify to. But I think Mr. Cheatham does.

Mr. Cunningham: Didn't we give you a memorandum on that, your Honor?

The Court: Yes. It is the same kind of a hocus-pocus that I have had before. It is language.

Mr. Cunningham, now I know that the type of legal training that you have had is one of the best legal trainings in America. I even think that you have gone to a better law school than I have. I have recommended a lot of young fellows go to that same school and I am sure that they tell you that language is meaningless except in relation to the facts of [332] the case. I can find language on anything. I don't even let people believe the language that I write. In fact, I have held against Mr. Pierre Kolisch not long ago when he cited my own language that I said. And I told him, "Don't worry about that. Just look at the result that I came to. That's what I want; I want the facts of these cases and I want to know what the judge did on those facts. If you have any case in which there is anything close to the facts in this case, I would appreciate an opportunity to look at those. [333]

Mr. Cunningham: Yes, I think it is well established, a well-established proposition supported by cases, that getting a new result as a means of a

new combination is patentable, and getting an old result in a new way is patentable. That is what it really amounts to.

The Court: I am not talking about that now. I am talking about Mrs. Kobernuss' testimony. Why does a housewife or saleslady who puts meat into a refrigerator, why can she testify to that in a court?

Mr. Cunningham: Well your Honor, why can't she? Is there any reason against it? It is an invention. That is, the refrigerator involved an invention. Will you tell me why——

The Court: I am the one asking the questions, Mr. Cunningham, and I have tried to find out on numerous occasions what you claim the invention to be, and I am frank to tell you that as of this moment I do not know what that invention is. Perhaps I am stupid, but I think that I understand things just as well as the normal person does.

Mr. Cunningham: We are sure you do, your Honor.

The Court: And yet I have not been able to find out—I am going to study again tonight. Perhaps I will find out. We will recess until 9:30 tomorrow morning.

(Thereupon, the evening adjournment was taken to Thursday, November 17, 1955, at 9:30 a.m.) [334]

Thursday, November 17, 1955—9:30 A.M.

(Proceedings herein were resumed, pursuant to adjournment, as follows:)

(In Chambers.)

The Court: Mr. Maguire was in chambers this morning, and I told him about some of the things which I found in the Potter deposition which I desire to repeat now.

Yesterday the deposition ended with a question relative to the Stewart-Warner case, and that is on Page 236, and at that time Mr. Byron objected to the introduction of any of the testimony with reference to the Stewart-Warner case. I have read all that testimony. It begins at Page 236 and ends on Page 245. I am of the opinion that all of the testimony is immaterial; it is self-serving; and at times it is hearsay, and I think it is very prejudicial. In my view, none of this testimony which goes to the misdeeds of the Stewart-Warner Company has any relevancy to this case at all. I have read the testimony that follows it concerning the negotiations with Sanitary Refrigerating Company, and I think it is Apex Electrical Company, in which Potter testifies that he entered into agreements with each of them, and they required different forms, and each time he went to another factory different molds were required, and the [335] upshot of all this testimony is that after a few boxes were built there was a proxy fight between two companies. The bankers were controlling these companies, and, therefore, they could not enter into production.

That is followed by testimony relative to Stewart-Warner, I think, again.

Mr. Byron: Morris, I guess.

The Court: Morris of the Weed Chain Company.

Mr. Byron: Yes.

The Court: I cannot see why it is relevant in this case or that they got $100,000 from Mr. Morris, of which a great part of that money went for payment of attorney fees, in the latter portion of the deposition, and that Mr. Morris didn't want to sue his own customers. Now, then, we get into the matter which I talked to Mr. Maguire about in connection with the General Electric Company. In that case the deposition is just filled with statements of what Potter said to Mr. Bristol, his own attorney, "Watch out for that dangerous company, General Electric Company," and "They are going to take advantage of you," and finally they did take advantage of him.

Now, I just do not understand how any of that testimony has any relevance to this situation, and even if it did, some of it, the answers are full of hearsay, and it is full of poison, prejudicial, of the worst kind, and if you want to let it in it is perfectly all right with me— [336] well, it is not all right with me either.

Mr. Byron: We object to it, your Honor. The only part that I thought that might possibly have some right in there was the fact that, and just the fact, that Apex took a license, and it had it for license; it was licensed for less than a year, and,

after, it was canceled; but it was a license. It did not work out—I do not know if that will do the plaintiff much good. He seems to think so.

The Court: Why can't you, in lieu of this, perhaps enter into a stipulation to the effect that a license was taken with Apex; that they had negotiations with other companies looking towards an agreement, and they were not successful?

Mr. Byron: I will take that stipulation.

The Court: But I realize that Mr. Potter is a difficult witness, but that does not justify all of the statements that he makes in here.

Mr. Byron: If we are going to speak about Apex, then I think we should have in there that the royalty rate was one per cent.

The Court: Then you get into a lot of other difficulties because Potter testified that he made a specific and particular deal with Apex, and they were going to offer him a lot of inducements, and I do not think that the one per cent royalty rate should go into a deal of that kind. [337]

Mr. Byron: Very well. Then I move to strike all that we have discussed this morning in connection with those various negotiations.

The Court: With the exception of the fact that they did enter into a contract with Apex?

Mr. Byron: Oh, yes; that is right.

The Court: That portion of the transcript, all right.

Mr. Byron: We will stipulate that portion.

Mr. Maguire: Well, I think it should be under-

stood I do not think I have been present at the reading of the deposition——

The Court: I volunteered the information to Mr. Maguire.

Mr. Maguire: I know, but I could not express any opinion because I have not, did not know the context of it. That is why his Honor suggested that counsel come in here.

The Court: Yes; well, I have been asking attorneys about various things and have been complaining to the attorneys, also.

Mr. Maguire: The only question that your Honor brought up was the question that I was not in a position to discuss. I had not read it.

The Court: I wish that you would have read it, Mr. Maguire. You could better appreciate what I was thinking of in this portion of the deposition.

Mr. Maguire: The difficulty is I got into this very, [338] very late, your Honor, and I have not had an opportunity——

Mr. Cunningham: Of course, your Honor, I read it, and I was there and took it. Our theory of relevancy is with respect to all of these people that the Rex and Apex and Sanitary, Universal Cooler, Morris, all of those that I have mentioned are the commercialization. They were actually producing refrigerators under the patent in suit. They sold thousands of them over a sustained period. By a sustained period I mean a year or two. They were going licensees, and, more than that—and the Jewett Company—they were Potter's source of supply for compressors and cabinets, and, like a great

many manufacturers, most of them, including Stewart-Warner, they had to have these sources of supply, and they are just as much a part of his commercial production under the patent, his licensing business under the patent, as anything else.

The Court: Do you have your production records of these companies or of Potter?

Mr. Cunningham: Well, sir, I did not bother to put them in. They are in the Stewart-Warner case. I thought the figures were not very pertinent. I have got them in the——

The Court: I think that is the most pertinent part of your case, is not what negotiations broke down or why the bankers did not crack down on these companies, but your production figures, and I think that if you want to put [339] those in, even though they have not been marked, it is perfectly all right. I will permit you to do it at this time. I think it is much more relevant than those.

Mr. Cunningham: Of course, your Honor, I feel —when you talk about generally there are certain statements in here, of course, that I think Mr. Potter was wandering and did not stick strictly to the answers to the questions, and so on, that there was nothing we could do about that. He is that type of witness. You have seen them before.

The Court: Mr. Cunningham, I just want to say I think you stimulated him into talking and to giving those types of answers——

Mr. Cunningham: Your Honor, he did not need any stimulating. I tried to hold him down. I really did. I interrupted his answers, which I think is ap-

parent here, and I do not see how we could possibly do any better than put the testimony in just the way he gave it. It ought to go in in his words, I think.

The Court: Even if much of the material is prejudicial and immaterial?

Mr. Cunningham: Your Honor, I do not know what is really prejudicial. Now, taking—of course, Morris, I did not mention him. Now, he was a businessman who undertook, as I recall the testimony, to try to license as many people as he could, and he thought the leaders of the industry, [340] under this patent. Well, it turned out that after he got to operating under the license he decided he did not want to, for business reasons of his own, so that matter resulted in a suit which was settled, but that is the other part of the operations under the patent. That is pure license, and, incidentally, there was a great deal of testimony, and I trust we are not going to get it in this case, of his efforts with different people—that was in the Stewart-Warner record—and with Frigidaire and other people like that. We have really boiled this down to quite a small piece, then, if you compare this with the Stewart-Warner case.

The Court: Mr. Cunningham, I am not comparing it with the Stewart-Warner case. I was not the judge in the Stewart-Warner case, and I am not criticizing the judge who sat on that case except to say that if I was the judge on that case I would not have permitted a lot of testimony that was per-

mitted. He may be right, and I may be wrong, but that is the way I run a Court.

Mr. Cunningham: Then, your Honor, we get to that case, the Stewart-Warner case, and, as your Honor knows, that was definitely the result of competition with Stewart-Warner. It was the only thing that the Potter people could do, was to bring this suit in 1943 because—we couldn't even get their suppliers and their dealers to handle those, then, and they had entered into this suit. [341]

The Court: That is the very reason you want all this testimony here. Here is a big conspiracy between all the big companies to prevent Potter from getting into business.

Mr. Cunningham: Your Honor, there isn't a word here about a big conspiracy. It is all the activity of Stewart-Warner.

The Court: Yes, perhaps there is not, but that is the impression that will be left with this jury, and I do not think it has any place in this case. I think that we have plenty to do to find out what your invention is and what the reach of the patent is and whether the boxes of Amana and Admiral infringe the claims of your patent, and, if so, what is the measure of damages.

Why don't we stick to the real issues in this case instead of getting on all these peripheral issues?

Mr. Cunningham: Your Honor, I think you are reading a lot more than I must be able to read out of this deposition. I think you are unduly sensitive to it. It is a pretty factual statement, as I recall it.

The Court: I do not read it that way. Mr. Cun-

ningham. I do not think that Mr. Potter's statements are factual. I think that they are—many of them are in the realm of fantasy, and he is putting in poison all throughout his deposition, self-serving declarations, no way of checking them, conversations that he had with various people who had [342] no connection with Admiral or Amana, conversations with his own lawyers. Now, under what theory of law, or under what rules of evidence is testimony like that admissible?

Mr. Cunningham: Your Honor, it is our position that, certainly, most of it from 236, did you say, on to the balance of the deposition——

Mr. Byron: No, up to 263, Page 263. We only went up to Page 263 in our discussion.

The Court: General Electric Company, how they happened to enter into that stipulation.

Mr. Byron: Up to 263.

Mr. Cunningham: I must say this, that I am somewhat taken aback. I could have—I really thought that Mr. Byron and I had agreed, and I can tell you exactly what my notes indicate, that we had agreed upon. Now, of course, that is not binding on your Honor, I realize that, but I did not think that that agreement, as long as we had reached it, would be disrupted in this fashion.

The Court: You agreed on the relevancy?

Mr. Byron: Oh, no; of course not. Relevancy is an entirely different question. We agreed on things that mutually we believed should go in. Of course, I wanted more out. He didn't want more to go out, and we covered those things upon which we

did come to an agreement, but on the other things we always reserved our rights to make [343] objections as to relevancy, materiality, and so on.

The Court: Mr. Cunningham, my impression was that Mr. Byron from the first minute he ever came into this case was complaining about the Stewart-Warner references.

Mr. Cunningham: Well, now, for example, I have noted here, and this is the only record I have found so far going forward from 236, that Mr. Byron—on Page 252 Mr. Byron informed me he was going to make a motion to strike that and it runs over to the top of Page 253, three lines, and I expected him to strike that, but nothing in between, according to my notes. Let us see if I have any more like that. I think I do. I do not know as I stopped short of that page.

Mr. Byron: I certainly didn't say I wouldn't raise an objection as to relevancy and pertinency and materiality.

Mr. Cunningham: Charlie, all I can say is that I felt—no, I beg your pardon—that these that I am now noting were the only points that you were going to raise. That was my honest feeling.

The next one was on Page 254, I believe—wait a minute, as I am not quite sure that you didn't agree to let that in, I had it crossed out, after we discussed it.

Running over to 255, my notes indicate that we agreed to let that in because it is a nationwide license, you see, and what these people were trying to do was to license [344] their patent liberally and

make some money out of their royalties through Mr. Morris. They wanted national advertising, and the big—and a big manufacturer to take on the exploitation of the patent under license.

Mr. Byron: But that did not work out. You sued Morris for $500,000 and got a $100,000 in settlement. What has that got to do with the patent in suit?

Mr. Cunningham: That is true.

The Court: Was that the portion that was stricken?

Mr. Byron: No.

Mr. Cunningham: My notes indicate that we agreed that we should let that stay in. That was my understanding.

The Court: Mr. Byron does not have that understanding, and in the absence of agreement as to the understanding, then I am going to permit Mr. Byron to continue with his motions to strike.

Mr. Cunningham: Now, there is another note which I think Mr. Byron is going to strike or move to strike, and that is on Page 258.

The Court: I have already passed that.

Mr. Cunningham: May I complete running through——

Mr. Byron: Up to the bottom of Page 263.

Mr. Cunningham: That is where we are; that is right. I did understand, sir, that from the very bottom, the last two pages of Page 258 to 263, that Mr. Byron reserved his [345] motion to strike. I did not understand that he was going to strike anything else, and my notes so indicate, and I think that——

Mr. Byron: Most certainly I have a right always to object to evidence or testimony that is not material and is not pertinent.

Mr. Maguire: I am a little at a loss. I was not there, and so I am a little at a loss about the time spent going over the deposition.

Mr. Byron: Well, to take out things that we could mutually agree upon that could be taken out. I wanted more taken out, and Mr. Cunningham didn't, so there was no use of our having a courtroom fight between ourselves, getting nowhere and spending the midnight oil, so we passed on.

Mr. Cunningham: And we noted these portions we wanted to strike, and I thought those were brought to his Honor's attention; we would strike them or not strike them if we were persuaded they were all right, but we had no such blanket striking, as your Honor now indicates, even when we were talking with Mr. Byron.

Mr. Byron: I do not say we had an agreement on blanket striking. I brought a motion to strike and objected to certain testimony here, and that is what we are considering here now.

Mr. Cunningham: Of course, relevancy—now, clearly, [346] the history of the invention after it was put on the market and the pioneering——

The Court: Mr. Cunningham, I am just telling you that if you want to put in production records of the boxes that were constructed by these various companies, I will permit you to do so. You can also put in a record of the royalties you received from

these companies, and I would suggest to Mr. Byron that a stipulation be entered into, if you desire, relative to some of the companies that you had negotiations with and that they broke down, if you want that.

Mr. Byron: I have no objection to that. [347]

Mr. Cunningham: That is no substitute for the flow of facts that we get in this record, your Honor.

The Court: I don't think that they are relevant and I am sustaining the motion to strike.

Mr. Cunningham: And I wish to make a record, if I may.

The Court: Certainly.

Mr. Cunningham: I wish to make a record, if I may, verbatim on all of this Potter deposition.

Mr. Maguire: I am just wondering in that respect where we are using depositions. I understood we were originally discussing this—to discuss this at an appropriate time, not necessarily interrupt the course of the trial, that those offers could be made.

The Court: Yes, that's right. I don't think it would be necessary for you to make a—read all the questions and answers into the record. I am striking all of the Potter deposition from page 236 to 263, with the exception that that portion of the testimony relating to the Apex contract which shows the licensing agreement alone may be admitted.

Mr. Cunningham: Your Honor, I suppose you mean the three-party licensing agreement?

The Court: Apex and—what is the other company?

Mr. Cunningham: I don't recall. I think it's——

The Court: Sanitary.

Mr. Cunningham: And then there is Sanitary and Universal [348] Cooler. I may be—there are two three-party licensing manufacturing arrangements and then there is this Morris thing, which is a straight license totally unrelated to Stewart-Warner, and anyone else that I know of, except, of course, the whole industry.

Mr. Byron: He is merely appointed agent to go out, run an agency to license people, and he didn't do anything about it.

Mr. Cunningham: And you realize we got $100,000 for the rights that he had.

The Court: Yes. And I realize it and if I let it in the jury is going to realize it from now to the end of the case.

Mr. Cunningham: Well, sir——

The Court: And that's what one of the main issues is going to be, and I am going to not permit it in this case.

Mr. Cunningham: Those were payments for rights under the patent.

Mr. Byron: I would like to make another point, that Rex was a manufacturer, he wasn't a licensee. That company wasn't a licensee. And that other company, Universal——

The Court: I will tell you what we can do——

Mr. Cunningham: Well, Continental was the

manufacturing outfit. That's a name we haven't even mentioned.

The Court: Will you, Mr. Byron and Mr. Cunningham, during [349] noon hour, go back to this testimony that I have stricken and agree, if you can, on the portions that may be admitted which deal specifically with the terms of the licensing agreement?

Mr. Cunningham: That's what we did before.

Your Honor, I think we have already done that. I will do anything that your Honor directs, of course.

The Court: Otherwise I will go through the thing myself and designate the portions which may be read.

Mr. Byron: I think time will be saved in doing it that way because——

The Court: I will do it at noon. We will start in at page 263 with the question "The patent was reissued" and the answer "Yes," and then go from there on.

Mr. Cunningham: 263?

The Court: Yes.

Mr. Maguire: Now, if your Honor permits an interruption, I am not arguing about your ruling——

The Court: Yes, I understand that.

Mr. Maguire: But I think for the record, because the deposition is not an exhibit, that it will be necessary to read in the question and answer. I don't see how we can preserve it otherwise.

The Court: Let's do that beginning at about 12:00 o'clock so that we can take up some of the—get these witnesses out [350] of the way.

Mr. Cunningham: Well, your Honor, why couldn't we just deliver this part to the reporter and let him copy it?

The Court: Well, if we are going to do that that way I want to be here when the questions are read and the answers are read, and I will rule on each question separately.

Bring the jury down.

Now, is Kobernuss one of your witnesses?

Mr. Cunningham: Bob is going to handle that. She wants to get away and I have two others that want to get away.

The Court: Now, so there won't be any misunderstanding about Kobernuss I want you to know that I am not going to permit her to testify as to the commercial success of other types of refrigeration, and her testimony must be limited to commercial success of the patent or of the invention here. This is going to make it a little difficult for me because, as I told you again, we talked about it this morning. I haven't found out what the invention is, but Mr. Maguire has promised me that sometime this morning he will dictate either to my secretary or maybe to the reporter, or maybe to his own secretary, a statement of what he believes the invention to be, and I am looking forward to that statement and I will give a copy to Mr. Byron.

Mr. Maguire: Well, I think, your Honor, your Honor's inquiry was made in open court. It will

only take me five [351] minutes—not over five minutes to say what I have to say, if it takes that long.

The Court: Do you want to say it right now or do you want to write it out and take a look at it and make corrections?

Mr. Maguire: I have tried to put in layman's language, to answer your inquiry, language that I could understand. As I said, your Honor, I think if I can understand it I know you can.

The Court: I believe that to be true, Mr. Maguire, and that's why I am so enthusiastic about your suggestion.

Mr. Maguire: Well, I can.

The Court: When do you want to do it?

Mr. Maguire: I can do it now.

The Court: All right. Fine.

Mr. Maguire: Yesterday afternoon the Court inquired as to what it was claimed the invention was, and in making this statement I want to make it perfectly clear that what I have endeavored to do —what I am endeavoring to do, rather, namely, to put in, as far as I was able, in layman's language, without waiving or limiting the language of the claims in the patent and the description of invention. I have done this because not only in patent cases but in any specialization persons who are engaged in it develop terminology of their own which is not always clear to persons who are not so engaged.

I think this is the way a layman would express it [352] and perhaps will answer your Honor's questions. The patentees invented a combination of

elements which co-operated together and produced the result of a refrigerator which, with a single power unit, enclosed in a single box of at least two compartments, in one of which temperature could be maintained above freezing, the air therein having a high humidity in which fresh foods, vegetables, fresh meats and light foods could be cooled but not be subject to dehydration to any substantial degree, and which did not require defrosting; and another compartment in which frozen desserts, and so forth, could be produced and already frozen foods could be maintained in that condition indefinitely, and in which the freezing element would not require frequent defrosting.

The Court: That is the invention?

Mr. Maguire: Yes.

Mr. Cunningham: Subject to the definition of the claims.

Mr. Maguire: Oh, yes.

The Court: I have listened pretty carefully to what you said and I would like to know from you how that is to be read in accordance with this statement: "The conjunction or concert of known elements must contribute something. Only when the whole in some way exceeds the sum of its parts is the accumulation of old devices patenable." Sometime when you get around to that I would like to know that.

I am reading from a note in the Berkeley Pump [353] Company vs. Jacuzzi Bros., 214 Fed. (2d) 786, and that's on page 787, the second paragraph of the note on the first column.

Mr. Maguire: I have that citation in another place, but I thought I would put it right on this note here. What is the title of the case?

The Court: 214 Fed. (2d) 785. That whole note is pertinent to the very thing that you have said here. Now, Mr. Cunningham, do you want to start with the deposition of Potter, or do you want to start with a witness?

Mr. Cunningham: Well, sir, I would like to get rid of these two witnesses.

The Court: All right. That's fine.

Mr. Cunningham: I would like to get rid of these two witnesses, Mr Bittner and Mr. Hermann, and then I think Mrs. Kobernuss, because she was here and has been here ever since the first of the week. Mr. Maguire will handle that.

I would like to make a statement with respect to her testimony, if I may.

The Court: You certainly may.

Mr. Cunningham: I think it would be better for me to do it here than in the courtroom because of what I am beginning to suspect is the difference between us, your Honor. I think it's a perfectly understandable difference, but I think it's a very real difference and probably almost approaches disagreement on the purpose of this testimony. But it is our [354] understanding that the law provides that a combination of old elements which produced, as they did here, a new and improved result, constitutes invention and is patentable and therefore it is absolutely essential that we have competent

testimony showing that our combination produced improved results over anything developed up to that time, or anything on the market up to that time.

I think the Stewart-Warner and the Admiral advertising—mostly the Admiral, as in this case—both explain some of the improved results in food-keeping and housekeeping to be obtained from the plaintiff's invention. The Potter advertising does the same thing and this testimony that your Honor has ordered stricken, I think, does it very significantly and cogently.

The Court: What testimony have I ordered stricken?

Mr. Cunningham: Well, that, as I understand, your Honor has ordered pages 236 to 263 of the Potter deposition stricken.

The Court: Well, go ahead.

Mr. Cunningham: I just wanted to point out—and it's not only in respect to that, but that Mrs. Kobernuss is a domestic science expert far more competent to give testimony on food-keeping and household results than could any engineer in the refrigeration industry, and she is called for precisely that purpose.

The Court: Well, I just want to tell you one thing right [355] now, that you are not going to introduce any testimony on the advertisements of Admiral or Amana to show commercial success. You can't do that by your adversaries.

Mr. Cunningham: It isn't to show commercial

success, your Honor. I don't know that I can improve the statement. I do think that unless your Honor allows us to show the effect of these improved results or new results——

The Court: Well, I think that your statement of the law, Mr. Cunningham, is impeccable; it certainly is correct, but it is only in the application of that law that there is any disagreement.

Mr. Cunningham: Well, your Honor, may I point out that I think you are depriving us of the only opportunity we have had after a 25-year struggle to prove the patentability by showing the improved results.

Mr. Kolisch: Of the invention. So long as you stick to talking about the invention, we have no objection. As soon as he starts talking about frozen food as such, or cooling, or something like that, we will object and we are making it right now. I don't want to have to get up in Court and start yelling about this. I think that your Honor appreciates our position. As long as the commercial success has to do with the invention——

Mr. Cunningham: Your Honor——

Mr. Kolisch: ——we are not going to say anything about [356] it. They are entitled to make some sort of a picture. We don't think commercial success is particularly significant in the absence of patentability and in the absence of the patent. It must be the commercial success of invention.

Mr. Cunningham: The housekeeping results, the new and improved results of this invention.

The Court: What does that tend to prove?

Mr. Cunningham: It tends to prove that we solved a problem that has long plagued the industry. It's old in the patent law and that's what I understand we are able to prove.

Mr. Maguire: The Eibel process, paper machine, the wire, the guide of the pulp chest to feed into the rolls, those things are all old. All Eibel did was not to change the product but to enable the product to be produced more rapidly and did it solely by using the well-known law of gravity by changing the pitch so that the pulp would descend it more rapidly. Now, outside of that there was no new element whatsoever.

Mr. Kolisch: A process patent, wasn't it?

The Court: Mr. Maguire, let's talk about this patent in suit. Suppose Mrs. Kobernuss gets up and says that now she can buy berries in the summertime and have them all throughout the year or she can, when she gives a lot of parties, instead of working the day before the party, weeks in advance she can make hors d'oeuvres and therefore put them [357] away and the day before or the day of the party she takes them out and it is just wonderful. How does that go to show result to the Potter patent? The freezing unit has been in use for years.

Mr. Cunningham: The Potter patent, your Honor?

The Court: No. No. A freezing unit. Maybe they weren't in a Dual-Temp refrigerator or a two-temperature refrigerator, but freezers are old in the art. The same thing is true with the fact that she says that she could buy lettuce and put it in the

cooling compartment and after four days the lettuce is just as good as new.

Now, is it your claim that moist cold was invented by Potter? [358]

Mr. Cunningham: Of the patent, your Honor?

The Court: No, no; of a freezing unit. Perhaps they were not in a dual-temp refrigerator or a two-temperature refrigerator, but freezers are old in the art. The same thing is true with the fact that she said that you could put lettuce, could buy lettuce and could put it in the cooling compartment, and after four days the lettuce is just as good as new. Now, is it your claim that moist cold was invented by Potter?

Mr. Maguire: You had moist cold when you had an old-fashioned icebox with a cake of ice.

The Court: Then moist cold is not something new in the art, but is an electric refrigerator that maintains moist cold new in the art?

Mr. Cunningham: We think so.

The Court: That is precisely what I am trying to find out. If that is your theory, Mr. Cunningham, you are going to be able to put in evidence with reference to vegetables or any other type of commodity that maintains itself in an electric refrigerator, but that is the very reason why I have been asking time and again what is your invention. Is it a non-defrosting coil? Is it a moist cold as pointed out by Judge Sparks? If those are the reach of your invention, then I know what to permit.

Mr. Cunningham: Your Honor, I think we may get together. [359] Freedom from frosting, those

things, I have really tried to point out to you, those are the end results. Maybe this will make it simpler. Supposing I invent a plow, a plow that plowed the field better than something else, couldn't I show evidence of that desirable improved result? We did not invent the field or the furrow; we invented a housekeeping tool.

The Court: Mr. Cunningham, perhaps this is not going to be an unmixed blessing for you, but, when I instruct the jury, I am going to have to tell them what you claim to be your invention. That is the very reason why I am asking you. I am going to come in and say you are claiming that you have an invention because you have a non-defrosting coil——

Mr. Cunningham: Because we have a result of humid atmosphere in an electrical refrigerator, that is one thing, one result, and our freedom from these defrostings, it is all combined in a unitary structure, and it is all subject to the much more perfect definition of the four claims in suit, your Honor.

The Court: I wish you would not go back to that all the time.

Mr. Cunningham: I know that, but I have to be realistic about the patent law.

The Court: We are not going to read the Potter deposition [360] until later. I will make a statement to the jury that there are live witnesses which we would like to have heard first.

(Thereupon, Court and counsel returned to open Court, and the jury having returned to the jury box, the following proceedings were had:)

The Court: Ladies and gentlemen of the jury, in a case of this kind which has technical aspects there is always a number of things to straighten out, and that is the reason why you have been called down earlier. Just as I thought I knew all the answers to the problems that were coming up this morning another problem arose, and, therefore, you had to remain in the jury box longer than you anticipated before we came out.

Yesterday afternoon before we adjourned we were reading portions of the deposition of Mr. T. Irving Potter, one of the inventors. Instead of resuming that deposition now, by consent of all the parties, certain witnesses will be called. I understand from Mr. Cunningham that they are short witnesses. Many of them or several of them might have come from long distances, and they would like to get home, and I do not blame them. So we will now permit Mr. Cunningham to call his first witness.

Mr. Cunningham: Thank you, your Honor. Mr. Hermann. [361]

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No. 15057

United States
Court of Appeals
for the Ninth Circuit

MOIST COLD REFRIGERATOR CO., INC., a Corporation,

Appellant,

vs.

LOU JOHNSON CO., INC., a Corporation; MEIER & FRANK COMPANY, INC., a Corporation; ADMIRAL CORPORATION, a Corporation, and AMANA REFRIGERATION, INC., a Corporation,

Appellees.

Transcript of Record
In Four Volumes

FILED
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Volume II
(Pages 409 to 806)

Appeal from the United States District Court for the District of Oregon

Phillips & Van Orden Co., 870 Bryant Street, San Francisco, Calif.—6-29-59

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Volume II
(Pages 409 to 806)

Appeal from the United States District Court for the District of Oregon

Phillips & Van Orden Co., 870 Brannan Street, San Francisco, Calif.—6-29-56

EDWARD T. HERRMANN

a witness produced in behalf of the Plaintiff, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Cunningham:

Q. Mr. Herrmann, I am standing way over here so you will keep your voice up and the ladies and gentlemen of the jury can hear you. Who are you?

A. My name is Edward T. Herrmann.

Q. Where do you live?

A. I live in Eugene, Oregon.

Q. What do you do?

A. I am a service manager for a Lincoln-Mercury dealer down there, automobile dealer.

Q. Have you ever had any connection with the Potter Refrigerator Corporation?

A. Yes, I have.

Q. Of Portland, Oregon? A. Yes, sir.

Q. What was that association?

A. I had charge of their shop. We made compressors and did various experimental work on refrigeration systems.

Q. Can you place the time of this employment?

A. Yes, sir; it was from early summer, 1929, to early summer, 1931. [362]

Q. Where was that plant located?

A. It was at Southwest Ninth and Flanders.

Q. What were your duties there, just very generally?

(Testimony of Edward T. Herrmann.)

A. Well, I had a crew of five or six people; they were mechanics and they did the work on building up refrigeration compressors as complete units and as single units; oh, compressors, for instance, and dehydrators, and we made coils, freezing coils.

Q. What do you mean by dehydrators?

A. That is a device that is put in the line, in the refrigeration line, to take the moisture out of the refrigerant so that it would not freeze in the expansion valve.

Q. What was the business activity of the Potter Refrigerator Corporation during these years?

A. Well, as I recall it, it was a group of people that had banded together for the development of a refrigeration process under Mr. Potter.

Q. Were you aware of any developmental work or experimental work that was going on at the Potter Refrigerator Corporation?

A. Yes, I was.

Q. Were you aware of any such work in connection with household refrigerators?

A. Yes, sir.

Q. At what period of time were you aware of this work?

A. Well, that work went on continuously from the time that [363] I joined the company until I left.

Q. Do you recall any so-called three-temperature or two-temperature boxes, household refrigerators? A. Yes, I do.

(Testimony of Edward T. Herrmann.)

Q. Did you use those terms, three-temperature and two-temperature, to mean the same object?

A. Well, the two-temperature box and the three-temperature box would vary by just the term. In other words, if you had a box, two-temperature, you had two temperatures; if you had a three-temperature, why you would have a three-temperature box.

Q. Do you see any old friends around the room in any of these refrigerators?

A. The only two that I recognize are the two tallest ones.

Q. May I identify those? You mean this one that I am stating is marked Plaintiff's Exhibit 11-B? A. Yes, sir.

Q. And this one that is marked Plaintiff's Exhibit 11-A? A. Yes.

The Court: Mr. Cuningham, are you going to use 11-B?

Mr. Cuningham: I just want him to identify it.

The Witness: Yes.

Q. (By Mr. Cuningham): If you want to come over and look at them——

A. No, I recognize them at this distance; yes, sir. [364]

Q. You recognize them well enough?

A. Yes.

Q. Were those two refrigerators or refrigerators of that type preceded by any other structures designed to accomplish the same end?

A. Oh, yes.

(Testimony of Edward T. Herrmann.)

Q. Can you give me in your own words a brief description of what those structures were that preceded these?

A. Well, the first ones we used were just the old-fashioned so-called iceboxes; that is, you had a place in the top where you put the ice and the food storage below.

Q. Can you tell me what mechanism was put into these old iceboxes?

A. Yes, we put freezing coils in them; that is, coils where the cold was produced, if you want to put it that way.

Q. How do you know that you put freezing coils in them?

A. Well, I know, because the work was done under my direction.

Q. Did you actually see it done?

A. Yes, sir; I did.

Q. What kind of freezing coils did you put in these old iceboxes, the first one, let us say?

A. Well, the first ones were just coils of copper tubing. We would make these coils up on a wooden form on a lathe. They were circular in shape, and we would put an expansion [365] valve on them and place them in the ice compartment.

Q. How many compartments were in these experimental iceboxes?

A. Well, the early ones were two compartments.

Q. How were they divided; vertically or horizontally? A. They were vertically.

Q. You are speaking of the first ones?

A. Yes, sir.

(Testimony of Edward T. Herrmann.)

Q. Can you give us with some more accuracy a statement as to the time when that box was being experimented with?

A. Well, it was one of the earliest things that I can recall that I was called on to do. I would say it was some time, well, some time between September and May, some time during that wintertime between 1929 and 1930. I couldn't come any closer on dates.

Q. Does that period of, as I figure, about seven or eight months, does that encompass all of the work on all of these experimental boxes? You say there were more than one.

A. Say that again, please.

Mr. Cuningham: May I have the question read, please?

(Last question read.)

The Witness: Oh, no; the experimental work, as I recall, was practically continuous, I would say, until about the spring of 1931. We were in experimental work all of that time.

Q. Can you give me a date for the earliest complete box but [366] without the compressor in the housing as it is in Plaintiff's Exhibits 11-A and 11-B? A. It would be pretty hard to do, sir.

Q. Will you do the best you can?

A. Oh, I would judge that those boxes were probably built in the summer of 1930.

Q. Would you say early summer or can you go that close?

(Testimony of Edward T. Herrmann.)

A. I am afraid I couldn't do any better than that.

Q. Now, if you know the refrigeration circuit of these early boxes, could you describe it, please, briefly, if you know it?

A. Yes, I think I can. On the early boxes that we made we used just a coil of copper tubing. We placed it in the upper compartment. Then we would attempt to govern the temperature in the lower part of the box by what we called the runoff from the cold storage compartment. We would attempt to adjust the expansion valve so that we would just get sufficient refrigeration in the lower part for food storage and have a frozen food compartment in the top part of the box. We had considerable difficulty with this because this was in the wintertime, and if we had a cold night we would find our frost line running clear on through the frozen food storage, and we had recording thermometers, and it would show that it would get down below freezing there. Then during the day the frost line would leave the lower box, [367] and it would become a normal condition for food storage, but it was not controllable, so we evolved the plan of controlling the food storage compartment, and we found that we had sufficient cold. As I remember the temperatures in the cold part, that is, the frozen part, it was running around 10 below zero, and we would still have adequate refrigeration but not too much in the food storage, that is, the normal food storage compartment.

(Testimony of Edward T. Herrmann.)

Q. Did you have frosting in the normal food storage compartment with this new arrangement?

A. Very little, very little frosting. It would frost through, as I remember it, just a very short distance.

Q. How about the relative insulation between these two compartments?

A. Insulation, did you say?

Q. Yes; was it heavier——

A. Well, the top compartment was heavily insulated, and the lower compartment was just normal.

Q. Do you mean the freezing compartment had heavier insulation; is that what you mean?

A. Oh, yes; very much.

Q. Are you sure you are correct in recalling that the top compartment was the freezing compartment? Wasn't it the bottom compartment?

A. No, the earlier experimental work—in the earlier [368] experimental work the top compartment was used.

Q. Did you reverse those compartments later?

A. Later on we put a brine tank in the bottom.

Q. Did you do that with some of these experimental iceboxes that were not really specially made?

A. Yes, we did.

Q. How did the circuit differ when you made this reversal of compartments, if it did differ?

A. Essentially, it was the same. I don't recall that there was any particular difference.

(Testimony of Edward T. Herrmann.)

Q. Mr. Herrmann, how did it happen that you are testifying here? Why?

A. I was asked to. I was asked to come up here.

Q. By whom? A. By yourself, sir.

Q. When?

A. Monday of this week, Monday evening.

Q. Are you sure of that? A. Yes, sir.

Q. Of this week?

A. Well, it was Monday. I am sure it was a Monday.

Q. Well, it is——

A. It was Monday a week ago.

Q. That is correct? A. That is right. [369]

Q. Have you any interest in the plaintiff, Moist Cold Corporation? A. No, I have no interest.

Q. Any interest in the patent in suit?

A. No, sir.

Q. You know about the patent, do you?

A. Yes, I know there is a patent.

Q. Potter patent. The witness is with you.

Mr. Ramsey: No cross-examination.

The Court: That is all, Mr. Herrmann.

(Witness excused.)

Mr. Cuningham: Mr. Bittner, please. [370]

GEORGE W. BITTNER

a witness produced in behalf of Plaintiff, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Cuningham:

Q. Mr. Bittner, where do you reside?

A. Where do I what?

Q. Where do you live?

A. I live out here at West Slope.

Q. What is your occupation?

A. Well, I worked under—in the Fouch Electric machine shop. I was a foreman up there.

Q. For how many years, sir?

A. I was there for 44 years.

Q. Did you ever know a person by the name of T. Irving Potter? A. Yes, sir; I did.

Q. Were you ever familiar with an organization called the Potter Refrigerator Corporation?

A. Yes, I was.

Q. Can you recall—can you tell us a little bit about how you came to know these people, this company?

A. Well, Potter came to us in 1927, and he laid a bunch of blueprints out for us—or to Mr. Fouch, and Mr. Fouch brought them out to me, thought we could handle that job, [371] and I said we could after looking them over. So we designed the first pump—or he had designed the first pump, and we made it, built it, and we done experimenting down below in the lower part of the building.

(Testimony of George W. Bittner.)

Q. What do you mean by pump?

A. Well, a compressor.

Q. For what purpose?

A. For refrigeration.

Q. That was what type of refrigeration?

A. Well, I don't—it was just ordinary refrigerating pump.

Q. Any type, household or commercial?

A. I don't know where they all used them, but then they used them mostly for household refrigeration right away; that is what he started. Afterwards they went into commercial stuff, too.

Q. Can you give us a date for this first association with Potter?

A. Well, that was in 1927 when they first—early in 1927 when we got acquainted with Potter.

Q. Where was his office then, if you recall?

A. Well, he didn't have an office right then.

Q. Where was the first office?

A. The first office was up in the Yeon Building, Fifth Floor of the Yeon Building, or it was the Tenth, I don't [372] know which, either one. It is in the Yeon Building.

Q. Was that about 1927?

A. That is the latter part of 1927.

Q. Did there come a time, Mr. Bittner, when he had any office in the Fouch—or plant in the Fouch Electrical Company premises?

A. No, he hadn't——

Mr. Kolisch: Your Honor, we are going to object

(Testimony of George W. Bittner.)

to a continuation of this line of testimony. Apparently he has not any idea or he has not stated anything to do with the patent in suit. He had something to say about a pump, and now he is starting to talk about some office space of Mr. Potter.

Mr. Cuningham: It was all preliminary, your Honor.

The Court: I want to tell you about a rule in this court, that when a matter is not in controversy you cannot prove it more than three times. Three witnesses is all you are going to be permitted. You have had at least four witnesses testify to the location of the Fouch Electric Company. You cannot do that any more. There is no dispute about where Fouch Electric Company is and that there was a machine shop because three times is all you can prove an undisputed fact. I do not think it makes a great deal of difference whether Mr. Potter had an office in the Public Service Building and prior to that time in the Yeon Building, so I suggest we [373] would get along much faster if you would ask the witness about problems about which you want him to testify.

Mr. Cuningham: I will try to, sir.

Q. Were you familiar with any developmental work on household refrigerators that was carried on at this Potter Refrigeration Corporation?

A. Not very much.

Q. All right. Will you tell us——

A. I really didn't have very much to do, I really

(Testimony of George W. Bittner.)

didn't have much to do with that except the machine work.

Q. Well, will you just describe what you did have to do with the Potter household refrigerator development?

A. That was the first one, the first one we made.

Q. First what, sir?

A. First refrigerator made by us.

Q. Where did you make that?

A. That we made at Fouch Electric.

Q. Was that made for Potter?

A. No; when Potter was there.

Q. When Potter—— A. He was there.

Q. Yes; you mean physically with Fouch Electric? A. Yes, he was with us.

Q. Was he employed by Fouch Electric?

A. No, no; he was there as the man that was, that would give [374] us the orders or what we wanted. He always brought his blueprints and drawings, and we built them according to the plans.

Q. You built these compressors; is that what you are talking about? A. Yes.

Q. Did you have anything to do with any experimental refrigerators that made use of the Potter compressors?

A. Not after we made the first one.

Q. Will you tell us about the first one, sir, the refrigerator?

A. The first one we made, Potter and I worked one night, and we experimented with it, but w

(Testimony of George W. Bittner.)

had trouble with losing pressure, and I just got a bright idea to turn that upside down so it would submerge them in oil. We put it in a lathe and tried it, and that is when we got onto it, onto the present compressor.

Q. You are still talking about the compressor, are you not? A. Yes.

Q. Well, do you, Mr. Bittner, know anything about the experimental work that went on with household refrigerators in a cabinet using a compressor?

A. No, I had nothing to do with that.

Q. You had nothing to do with it? [375]

A. No.

Q. You do not recall that Potter did any of that at Fouch Electric when he was there?

A. We made one, the first one we made, the very first one I am talking about; that is the only one.

Q. Are you talking about a refrigerator or a compressor? A. Both.

Q. All right, sir; will you tell us about the refrigerator?

A. Well, all I know is that one we made where we used one of those old G.E. boxes. We put an evaporator inside of that box.

Q. Can you give us a date for that?

A. Well, that was in 1927. That was the first one we ever made. I have a picture of it here.

Q. Do you have a picture of it here?

A. Yes.

(Testimony of George W. Bittner.)

Q. Could I see it, please?

A. I left it right under my coat there.

(Picture referred to produced.)

The Court: Do you want to have that marked for identification?

Mr. Cuningham: Your Honor, it may not relate to the issues. I have never seen it, as I recall.

The Witness: It shows the compressor.

Mr. Cuningham: Yes. [376]

The Witness: There is the box with the evaporator. (Indicating.)

Q. What is this binder, Mr. Bittner?

A. Well, that was just the first patent, the first pump we ever made and testimonial letters of different people when they seen the machine, what they thought of it.

Q. Does this have the type of compressor that you have been talking about here?

A. Yes, there is a compressor right there. That is the one there (indicating).

The Court: Mr. Bittner, will you please speak a little more loudly so that the jury can understand you. [377]

Q. (By Mr. Cuningham): Well, if I understand you, Mr. Bittner, do you mean that you do not recall any refrigerators like those, and I point to the one that is marked 11-A, the far one on the left, at the Potter Refrigerator Corporation?

A. I don't remember seeing it, no, sir.

(Testimony of George W. Bittner.)

Q. I mean, ones like that?

A. No. No. They weren't like that. We used a G.E. box. The first one we ever made was a G.E. box.

Q. And what is your best recollection as to how long this work went on with the General Electric boxes?

A. Well, it went in the year '27 and into '28, and then they started buying different boxes, Gibson boxes, Leonard boxes.

Q. Well, now, did you see any of those at the Potter plant?

A. Oh, I have seen them. That's when they took the place next door to us.

Q. Yes.

A. They had—they had to expand, needed more room, and they moved next door in an empty building.

Q. Well, now, have you any recollection at all of the construction operation of those boxes when they took the plant next door?

A. No, I don't.

Q. You don't know?

A. Potter had his own crew by that time, his own people, and all we done was machine work on special experimental work. [378]

Q. Was there any secret that might prevent you from knowing about them at that time?

A. Well, they had their own floor and they didn't allow everybody to come in there then.

(Testimony of George W. Bittner.)

Q. And you were not——

A. I very seldom got in there.

Q. You were not an employee of Potter, you were an employee—— A. No, I was not.

Mr. Cuningham: The witness is with you.

Mr. Ramsey: Might I see the document you were looking at?

The Witness: What do you want, the box?

Mr. Ramsey: Y . That's the one. I would like to look at it.

The Witness: That is the box.

(Whereupon, the bailiff handed the document to Mr. Ramsey.)

Cross-Examination

By Mr. Ramsey:

Q. Can you remember the details of that box that you have a picture of?

A. You mean describe the compartments in it?

Q. Yes. Was there more than one compartment?

A. Oh, yes. There was—there is a big door on one side [379] and a three-quarter door on the other and a small door down below.

Q. That is, did it have more than one temperature? A. No, not that box. It was a——

Q. Single temperature?

A. Single temperature.

Mr. Ramsey: No further cross-examination.

Mr. Cuningham: Thank you, Mr. Bittner.

Mr. Maguire: Call Mrs. Kobernuss.

(Witness excused.) [380]

RUTH KOBERNUSS

was produced as a witness in behalf of the plaintiff and, being first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Maguire:

Q. Will you state your name, please?

A. Ruth Kobernuss, K-o-b-e-r-n-u-s-s.

Q. Mrs. Kobernuss, where do you now live?

A. Hot Springs, Arkansas.

Q. And are you in business there?

A. Yes, I am.

Q. What is the nature of the business?

A. We do interior decorating.

Q. Were you ever an employee or have anything to do with the Potter Refrigerator Corporation?

A. Yes, I did.

Q. And where was it?

A. Buffalo, New York.

Q. Buffalo, New York. And about what year?

A. Early in 1937 through '40.

Q. 1937 through 1940? A. Right.

Q. And in what capacity?

A. I was the home economist of the Potter Refrigerator Corporation. [381]

The Court: I didn't hear.

The Witness: I was the home economist of——

The Court: Of what?

The Witness: ——the Potter Refrigerator Corporation.

(Testimony of Ruth Kobernuss.)

Q. (By Mr. Maguire): Did you have anything to do with the sale of the products?

A. The sale of what?

Q. Did you have anything to do with the sale of its product? A. Yes, I did.

Q. And what were your functions there as home economist? What was the nature of your work?

A. Mostly after a refrigerator was purchased, it was my duty to call on the housewife, the new owner of the Potter refrigerator and to help her to get the greatest benefit out of her refrigerator.

Q. Now, do you see here in the courtroom any of the Potter refrigerators of the type which were then being manufactured and sold? A. Yes.

Q. And would you point out which one it is?

A. It is this one at the end in different sizes.

Q. And that is—what is the exhibit number, Mr. Cuningham?

Mr. Cuningham: That is Defendants' Exhibit 116.

Mr. Maguire: Thank you.

Q. And were you familiar with that refrigerator and its [382] mechanism, how it operated?

A. Yes, I was.

Q. Now, before you went with Potter were you familiar with the electric refrigerators which were then on the market? A. Yes, I was.

Q. And were they in separate compartments so far as the food and frozen food were concerned, or was it all one compartment?

A. Anything that I had ever known about was

(Testimony of Ruth Kobernuss.)

one compartment—one-compartment refrigerator.

Q. After you became employed by the Potter Refrigerator Company, did you have occasion to become familiar with the various makes which were on the market and which might be called competitors of the Potter in the electric refrigerating business?

A. Well, to my knowledge there wasn't anything else like it.

Q. Well, I don't mean that they are the same type. A. Oh.

Q. But the other kind of electric refrigerators on the market. A. Yes.

Q. At that time did you learn or become acquainted with any electric refrigerator which had compartments, one which we will term roughly as a fresh food compartment, a comparatively high temperature above freezing, and another compartment or compartments which were freezing [383] compartments?

Mr. Kelisch: Your Honor, I would like to inquire at this time what this witness is now being offered for, an expert on refrigeration?

Mr. Maguire: No, sir.

The Court: No, apparently not.

Mr. Maguire: No, not at all.

Mr. Kelisch: Thank you.

Mr. Maguire: What was the last question?

(Last question read.)

The Witness: No, I had no knowledge of such.

(Testimony of Ruth Kobernuss.)

Q. (By Mr. Maguire): Were there on the market at that time? A. Yes.

The Court: The objection is sustained, the jury is instructed to disregard it. She can't tell whether there were any such boxes on the market. She was living in Buffalo, New York. Is she going to testify that of her own knowledge there were no such boxes on the market?

Mr. Maguire: Why, yes, I think so.

Mr. Kolisch: Well, that is the reason why we asked whether she was an expert who knew everything in this field. Obviously she didn't know. How could she testify?

Mr. Maguire: Well, that's a conclusion.

The Court: That's right, that's a conclusion, Mr. Maguire, and we want the witness to testify about facts.

Mr. Maguire: I was speaking about Mr. Kolisch's conclusion, [384] not the witness', your Honor.

The Court: Well, that's her conclusion, too. All right, it is in, anyway. I will take care of it at a later time. I might say I am going to give you wide latitude with this witness, Mr. Maguire. I am notifying the other side of that and at a later time I will rule on some of the admissibility.

Mr. Maguire: Well, your Honor, I don't intend to take much latitude on this witness.

The Court: All right. Go ahead, Mr. Maguire.

Q. (By Mr. Maguire): Now, had you and did

(Testimony of Ruth Kobernuss.)

you at that time and during your time there acquire by observation and by use knowledge of how the refrigerator worked in operation? A. Yes.

Q. And did you during that period have an opportunity to observe and to learn how refrigerators which had a single compartment worked and how they operated? A. Yes, I did.

Q. In what we will call the fresh food or the moist—it's been termed here in the courtroom moist cold compartment—did you observe what effect the cooling there had upon fresh foods, particularly those which had water content like lettuce, fresh peas, or fresh fish, or things of that kind, with respect to whether they remained in the same condition after they were put in as they were when they were put in? A. Yes, I did. [385]

Q. Would you explain that, if you will? State what you learned and what you observed.

A. The fact that it was moist cold, it wasn't required that vegetables or foods with high water content be kept covered to retain their moisture nor was there a transference of odors of one food to another of all those foods kept in the moist cold compartment.

Q. Now, did you observe what happened when those same kind of foods were put in the refrigerator—in an electric refrigerator which did not have a moist, cold compartment of a comparatively high temperature above freezing, up to 40?

A. Yes.

(Testimony of Ruth Kobernuss.)

Q. What did happen?

A. They would dry out and, of course, would have to be wrapped or put in airtight containers in order to retain their moisture.

Q. Did you observe whether or not the coils or pipes, whatever the technical name is, in the fresh food compartment became frosted?

A. That was called the finned coil and did not gather ice.

Q. And did not gather ice?

A. No, not gathering ice, it did not take out the moisture from the food except in the compartment, and thereby retained—that was the principle by which it retained its moisture.

Q. And did that require defrosting at all? [386]

A. No; never.

Q. Now, with respect to the other compartment, for lack of a better term I will call it a freezing compartment, did that compartment have an arrangement there whereby you could freeze things like water and make ice or desserts of any kind?

A. It had a freezing shelf on which the ice cube trays were kept and then a compartment directly below that, or in the same compartment, in which, as today, meat and anything else would freeze very quickly after it was placed in that compartment.

Q. Could that freezing compartment be used for the purpose of making desserts, frozen desserts, of any kind? A. Yes, it could; uh-huh.

Q. Now, at that time and during the time you were employed with Potter, were the so-called

(Testimony of Ruth Kobernuss.)

frozen foods, any of the so-called frozen foods on the market?

A. Well, there were vegetables. Back in those days there wasn't a variety. I don't recall just what there was. Just some vegetables, I believe, and strawberries.

Q. Yes. A. Nothing of any great variety.

Q. Now, in that same compartment we have been talking about, why, we will call it the freezing or sharp cold—I don't know just what the trade term is for it—could that be used and was it used for the purpose of either storing and [387] keeping in frozen condition foods which were already frozen or in freezing foods which had not been frozen?

A. Yes, sir.

Q. And in that compartment did those foods which were already frozen or foods which had been frozen and put in there—what can you state as to whether or not that compartment maintained them in the same condition in which they were put in?

Mr. Kolisch: Now, your Honor, we are going to object to a continuation of this line of questioning. There is no issue in this case whether or not you had a freezing compartment, and that there was a freezer. We all know that freezers exist. I don't think that there is any question here as far as the defendants are concerned that frozen foods existed and that there were devices by which you could maintain frozen foods.

The Court: Yes. Well——

Mr. Maguire: All right. If it is conceded I will

(Testimony of Ruth Kobernuss.)

not pursue it.

The Court: I am just going to let you permit this witness to continue for awhile unless you want to withdraw the question.

Mr. Maguire: Well, it's——

The Court: There is no question about, and you are not claiming a patent on the freezing compartment. They have been in existence for a long time.

Mr. Maguire: If counsel will so concede it we will go [388] along with it.

Mr. Kolisch: Oh, we concede it.

Mr. Cunnigham: Your Honor, may I have the question?

(Last question read.)

Mr. Cuningham: Now, as I understand the question, your Honor, it refers to the freezing compartment in the combination of the patent in suit. Those, of course, we do not concede.

The Court: Well, Mr. Cuningham, I think that Mr. Maguire knows what he is doing. He is an old, experienced trial lawyer, and doesn't need any help.

Mr. Maguire: I am going to have to concede that even Maguire makes mistakes at times. It's humiliating but I will concede that.

Q. Now, did you, yourself, during that period of employment sell Potter refrigerators?

A. Yes, I did.

Q. And can you tell us either the exact number

(Testimony of Ruth Kobernuss.)

or the approximate number of Potter refrigerators which were sold?

A. I don't believe I could answer that question exactly.

Q. Well, go ahead. I didn't mean to interrupt. Go ahead.

A. I know that I demonstrated the use of several hundred. I don't know that—whether I was in the store—I would take a part in the sale of refrigerators and the sales organization handled most of that. But I helped in the selling of the refrigerators. [389]

Q. I see. Now, in a refrigerator—electric refrigerator—which did not have these two separate compartments, one for moist cold and the other for freezing—which did not have those, was it possible to keep fresh vegetables and foods, fresh foods, which had moisture content in open containers or laid on the shelves?

A. Well, it would be possible, but they would dry out very rapidly because of the——

Q. What was there about the fact of drying out that would have any disadvantage?

A. Well, foods—many have a high water content. We want to eat them when they—in the same condition in which we placed them in the refrigerator. That's why we have a refrigerator.

Q. Now, did you, yourself, own and use a Potter refrigerator? A. Yes, I did.

Q. And did you have occasion there in your own domestic realm to observe the same thing you have

(Testimony of Ruth Kobernuss.)

observed—you have testified here as to the customers?

A. I tested everything that I told them the refrigerator would do and I did the very same things at home to be sure that I was right.

Mr. Maguire: Yes. Would your Honor excuse me just a moment?

The Court: Perfectly all right. Take your [390] time, Mr. Maguire.

Q. (By Mr. Maguire): Do you know, Mrs. Kobernuss, whether or not the users of the electrical refrigerators, those whom you had contact with, replaced the old single-chamber refrigerator—electric refrigerator with Potter?

A. I do know that in most every case the Potter replaced the conventional-type refrigerator of one compartment.

Q. And why?

A. Well, for two reasons: One, to have a moist cold compartment, and then, two, to have a refrigerator in which they could keep frozen foods and freeze their meat and have the other compartment in one refrigerator.

Mr. Maguire: May I approach the witness?

The Court: Yes.

Q. (By Mr. Maguire): I hand you here a book which bears the tag containing the Exhibit No. 6-DD, and I will ask you to examine it and state whether you recognize it.

A. Yes, I do. This is the literature used in the

(Testimony of Ruth Kobernuss.)

sales of our refrigerator, the Potter refrigerator.

Mr. Maguire: Yes.

May I approach the witness?

The Court: What do you want?

Mr. Maguire: May I approach the witness?

The Court: Yes.

Q. (By Mr. Maguire): And that was during the time you were [39!] employed by them in the years in question. And is that what one might call the kit? A. That was part of the kit.

Q. Part of the kit. A. That's the kit.

Mr. Maguire: Now, your Honor——

The Court: Has that been identified already?

Mr. Cuningham: Yes, your Honor.

Mr. Maguire: It's been identified but not received.

The Court: Have you offered it?

Mr. Maguire: I am going to try to save a little time, your Honor, if I may. I, of course, will turn it over to the defendants' attorneys.

The Court: Yes, I would appreciate that. I am getting to like you better and better all the time.

Mr. Maguire: I never take more time to curry a horse than is necessary. There may be some discussions about this. I think perhaps it has been identified, and if we may offer it without the necessity of the witness being on the stand, we could do it that way.

Q. Now, I hand you another document which bears identification No. 6-Z——

The Court: Let me take a look at that.

(Testimony of Ruth Kobernuss.)

Mr. Maguire: Yes.

(Whereupon the exhibit was handed to the Court.) [392]

Q. (By Mr. Maguire): I likewise hand you another one which is marked 6-AA, and I will ask you to state whether you are familiar with them?

A. Yes, I am, with that one.

Mr. Cuningham: Will you repeat the answer?

The Witness: Yes, I am.

The Court: Both of them?

The Witness: They were part of the same literature used.

Mr. Maguire: Yes.

Q. That was put out by the Potter Refrigerator Corporation?

A. By the Potter Refrigerator Corporation.

Q. Did you have occasion in your work to use it?

A. Yes.

Q. Did you use both of them or just one of them, or what?

A. Well, different parts of both of them.

Q. Yes.

A. At different times we used all of it.

The Court: Are plaintiffs offering it?

Mr. Maguire: I would like to do the same thing. I don't know whether to offer all of it or——

The Court: Give it to Mr. Byron.

Mr. Byron: Thank you.

Mr. Maguire: You may inquire. [393]

(Testimony of Ruth Kobernuss.)

Cross-Examination

By Mr. Ramsey:

Q. Mrs. Kobernuss, you testified that you put vegetables in the food compartment and they did not dry out. Did you put them in water, for example, such as lettuce?

A. Celery or lettuce was put in a small dish of about a half inch, quarter inch of water. [394]

Q. You were asked about frost accumulating in that chamber, and you said it had a finned coil. What frost was in that chamber, not referring to the fins on the coil?

A. There was no frost in that chamber.

Q. No frost in the chamber whatsoever?

A. No, no frost.

Q. Did you examine the pipes in it carefully?

A. Well, on the coil that was in the—in that compartment there was no frost.

Mr. Ramsey: No further cross-examination.

Mr. Maguire: That is all.

The Court: Mrs. Kobernuss, you are excused from further attendance at the trial, and the same applies to Mr. Bittner and Mr. Herrmann if they are still in the courtroom.

(Witness excused.)

The Court: Ladies and gentlemen, we have gone now for an hour. We will take a short recess.

(Thereupon, the jury retired for the morning recess.)

The Court: Mr. Maguire, I want to publicly acknowledge the deep debt of gratitude I owe you for the excellent way in which you handled that witness. I thought I was going to [395] have a lot of trouble, and there was no trouble at all. I hope all counsel emulate Mr. Maguire. He only asked for things that are important.

(Recess taken.)

The Court: Ladies and Gentlemen of the jury, I call your attention to the fact that this morning we interrupted the reading of the Potter deposition because we wanted to hear from some witnesses. Some of this testimony I have ruled to be inadmissible. Counsel, start with the questions on Page 263, the statement: "Mr. Cuningham: May I interrupt"—from there on. You may have an exception and preserve your record at a later time.

(Thereupon, the reading of the deposition of T. Irving Potter was continued as follows.)

DEPOSITION OF T. IRVING POTTER

(Continued)

"Q. (By Mr. Cuningham): The patent was reissued? A. Yes.

Q. That is the patent in suit, is it not?

A. Yes.

Q. Now, what was the state of your finances at

(Deposition of T. Irving Potter.)

about this period—you and the patent owners' finances in 1948, '49 and '50? [396]

A. In 1948, '49 and '50?

Mr. Cuningham: Yes, would you characterize them for me? Were they low or high?

A. They were very low.

Q. Did you have any money left after you reissued this patent?

A. Practically none, sir. Very little.

Q. How did you meet that situation?

A. Some of the people who had backed me from the very beginning in carrying on my battle, they all were making monthly payments to the firm of Potter and Halsey.

Q. How long had that been going on?

A. That had been going on since 1938.

Q. Do you mean 1938 or '28?

A. No, I mean this: The first money they put in, they put in by purchasing interest in my pump patent.

Q. What year was that?

A. That goes back to 1927 when we started. You can divide the money I received to carry on my work into two sections. In 1927 we started what we call the syndicate where people purchased an interest in my pump patent. Now that is all they purchased legally. They did not give me the money as an operating fund. They purchased from me and that money was mine and the patent was theirs. But I used that money to further the interest of all

(Deposition of T. Irving Potter.)

of us. It was during that [397] time that I evolved, along with Mr. Bronaugh, this two-temperature or three-temperature cabinet. The capital that I used came from that group in that way. I continued holding the patent on the cabinet in my name.

In 1938, I believe I am correct on that date—I think I am correct on that—we formed the Refrigeration Patents Corporation. I turned over everything I had, patents, models, rights, everything to the Refrigeration Patents Corporation.

I first turned it in or I turned it over in trust to our lawyers with instructions that they organize that company, that when the company was organized, that they distribute the stock of that company according to the list which I gave them and which embraced all the people who had put money up with me on the pump patent, because I technically —technically they were only in the pump. I felt they were morally interested in everything I was doing.

This was my means of establishing that. That left them in a position that we weren't in a position to raise money as we had in the past. The people who had been putting money into it, they hired the firm of Potter and Halsey to represent them in their interest in that company.

Q. Mr. Potter, I think——

A. (Continued): They paid us as a service fee.

Q. I think you misspoke. You said, 'I felt they were [398] morally interested in the pump patent.'

A. No.

(Deposition of T. Irving Potter.)

Q. The patent in suit, you mean?

A. Yes, that is right.

Q. Did you mean that you felt they were morally interested?

A. I thought they had a moral right to an interest in the pump patent. Over that period of those two periods that I speak of, those men had put in over $1 million to back me personally in my fight.

Q. Over what period of years?

A. Starting with 1927, but most of what they put in would start from the cabinet period. They put in much more during that period.

Q. Is that from the early '30's? A. Yes.

Q. Would it be a conservative——

A. From the early '30's up to the present would represent a period of some 25 years.

Q. Now, do I understand you correctly to say that over $1 million was collected from these backers of yours throughout that period?

A. I don't know that it was exactly that. I know that the total runs away over $1 million. The biggest part of that would be from the '30's on. I have never totaled up the figures. I don't know. It would be—I believe it would [399] probably add up to $1 million.

Q. Did you get this $1 million in one lump sum, or how did you get it?

A. That came in monthly payments.

Q. Have you ever had a million dollars in your life? A. No, sir.

(Deposition of T. Irving Potter.)

Q. What did you do with respect to continuing your business, if you did anything, in 1949 and '50, and by that I mean your business under the Potter Reissue Patent—Potter and Bronaugh——

A. In our efforts to get ahead and get into a commercial position that we thought was warranted through a Mr. Seamore, a man who I had known, he introduced me to a Mister——

Q. Is the name Sanborn?

A. Yes, Mr. Sanborn, who claimed that he was in a financial business. He was a lawyer, but he said his principal interest was in finance. Mr. Sanborn stated that he could organize a company that could give us the capital necessary to go ahead. We had built, designed and built, a new model Potter, which we felt would go into the market with the least amount of difficulty, because all the refrigerators on the market then and until now are in the class of Fords and Chevrolets. We felt nobody put out what I would call a Cadillac type. Whenever you have a large market you can always get a percentage of people who want to buy the luxury type, the best—— [400]

Q. May I interrupt you a minute? To shorten this, is a picture of that cabinet on the wall in this room? A. Yes.

Q. Are there other pictures of it overhead?

A. Yes.

Q. I show you a photograph and ask you if you can identify that?

(Deposition of T. Irving Potter.)

A. That is the cabinet I am speaking of."

Mr. Cuningham: I offer that photograph in evidence and I would like to have the jury look at it. It is No. 3-III.

Mr. Byron: Your Honor, we will object to this because this is something that is being produced after the expiration of the patent in suit and is a new product entirely. it has nothing to do with it.

The Court: Tell me that over again. It was produced after the patent in suit?

Mr. Byron: Yes; after the patent in suit expired. Now, he has gone into a new project here developing or selling this so-called de luxe, this Cadillac-type of refrigerator. Well, that's all right, if he wants to do that, but it has nothing to do with this suit.

Mr. Cuningham: That is not quite true, your Honor. It wasn't, as I recall, after the patent expired.

The next exhibit which I intend to offer here is 3-JJJ, and that shows a design patent on a portion of that [401] particular patent.

The Court: Is the design patent involved in this litigation?

Mr. Cuningham: No, sir; but it simply is illustrative of what the intentions were at this time and I suppose still are with respect to the future business.

Mr. Byron: That's right. And intentions are nothing.

The Court: The objection is sustained. Mr. Cun-

(Deposition of T. Irving Potter.)

ingham, I listened with great interest to this testimony about this million dollars but I really can't see the relevancy of that, and I was just wondering because I hadn't read this portion of the testimony before. Have you gotten together on the balance of this testimony?

Mr. Cuningham: Oh, yes, your Honor.

Mr. Byron: Well, we have gotten together in this sense: Mr. Cuningham and I went through the record with the idea of following your instructions to eliminate as much as we could. Well, sometimes Mr. Cuningham and I agreed and sometimes we didn't. Where we agreed we canceled those portions, but there are a lot of portions that have not been canceled and we do not agree. Now, where I am reserving my rights on anything involving materiality and relevancy and competency, we did not agree.

The Court: All right. Now, what about this design patent?

Mr. Byron: I don't see where that has any relevancy at [402] all and I object to it.

Mr. Cuningham: I will offer it, your Honor, for the purpose of the ruling.

The Court: All right. The objection is sustained.

Mr. Cuningham: Exhibit 3-JJJ.

The Court: A design patent issued August 30th, 1949, has no relevancy to the patent in suit nor to any of the issues involved in this litigation and, therefore, the objection will be sustained.

Mr. Cuningham: May I note on the record, your

(Deposition of T. Irving Potter.)

Honor, and I agree with Mr. Byron's statement that we did get together and we did have this agreement. I didn't intend to bind him by such an agreement as to any motion to strike that would be made.

The Court: What about this testimony which I see on the bottom of page 269? Doesn't that refer to the Cadillac-type refrigerator and the designed patent?

Mr. Byron: Yes.

The Court: Well, for how long does that continue?

Mr. Cuningham: Well, if your Honor please, you realize there are certain fringe issues in the case that we perhaps may not have in mind to which this testimony may relate. I submit they are important issues.

Mr. Byron: Well, this Sanborn, referring to Sanborn, he was a financier and Mr. Potter apparently wanted to become [403] associated with people with money, with the idea of developing some organization, probably, to ultimately manufacture or to sell with all the financial schemes insofar as this testimony is concerned to develop some corporation, do some of these big things and get some income.

The Court: How far did that go?

Mr. Byron: I would say to about page 272. Then beginning there, there is another situation, another financial setup. We would be glad to have that in.

The Court: But, Mr. Byron, I might say this: That even—either this testimony is admissible or

(Deposition of T. Irving Potter.)

inadmissible, and you can't select portions like that million-dollar one and this portion over here which is advantageous to you. I don't think that that is exactly cricket. Now, either the testimony is hearsay and is not applicable, or it is relevant. And if it isn't relevant I don't think it should come into the case, even though it may be beneficial to you. I want to state my position on that. So I think if it has no more relevancy than the portion on 272, it shouldn't remain in the case.

Mr. Ramsey: I think, if the Court please, that on 272 it goes into the question of title in this patent and predecessors in interest to it. Now, plaintiff in the case—and to that extent it is relevant.

In other words, there was a series of [404] transactions in which interests flow from one to the other and we have put them on proof of title, and to that extent it is relevant. How relevant, I don't know.

The Court: Well, is it your opinion then that in order to prove plaintiff's case plaintiff is required to put in this testimony, or do you have other testimony of this kind?

Mr. Cuningham: Your Honor, our proof of title is complete and it was admitted by the defendant four years ago.

The Court: No speeches, Mr. Cuningham. I just asked you a simple question. So you don't need this testimony.

Mr. Cuningham: No, your Honor, but I have no desire to hold it back.

(Deposition of T. Irving Potter.)

The Court: All right. If the defendant wants it it is all right with me. 269 to 272 is stricken and you will have an opportunity to make a record. Start in on 272.

Mr. Cuningham: May I note an exception, your Honor?

The Court: Yes.

Mr. Cuningham: Now, where may I start, 273?

The Court: 272, "By Mr. Cuningham."

"Q. What is your intention, or what is the intention as you understand it, of the holders of these patent properties?

A. I would have to speak on that for the trustees of our former syndicate, because they are part of the Board of Directors of the Moist Cold Company. They have been interested from the earliest time to see this commercially successful, and [405] I have no authority to speak for the Moist Cold Company. I am sorry, but my personal desire, and I know it is their desire, because they have expressed it to me, is that as soon as possible we want to put this de luxe box on the market.

Q. Now I think you said at the outset something to the effect that you had one share of stock in the plaintiff. Have you any other interest in the Plaintiff corporation, Moist Cold?

A. I have a moral obligation to all of the people that have backed me through the years, and I consider that is more than a financial obligation.

Q. Did you turn over any property to them or to the trustees for that group of backers?

(Deposition of T. Irving Potter.)

A. I turned over everything I had to the Continental Company, for which the trustees received 60,000 shares of the Continental stock. Now to make the position clear, prior to that time things were largely in my name. I had had a serious break in my health. I was conscious of the fact that if anything happened to me where I was the key man and had title to things, that that could just disrupt everything.

So I formed a trusteeship with three of the leading backers who backed me through the years as trustees. I turned over full title of everything to them, full control and in that——

Q. You mean trustees for these backers? [406]

A. Yes, and in that trust agreement I set it up that it was to be entirely in their hands, in their judgments. I would not superimpose my judgment on it. That when we got around the corner and got over to a profitable basis, the operation—in the operation—that whatever in their judgment they felt I had coming to me, they would get—and I told them to make it clear from a legal standpoint if it was only one share that I gave a full clearance and a release from any obligations beyond that one share; anything else that I received was to be at their judgment as to what they thought was fair and right.

I also laid out in this Trustee Agreement that they were to take the responsibility of seeing that those of my backers who had backed me right on

(Deposition of T. Irving Potter.)

through were taken care of, and that how they did that was to be based on their judgment, and I tried to word that in such a way that lawyers couldn't get in and interpose technical objections, and so forth. I wanted to protect the interests of those men who had so loyally backed me. I felt it was necessary, because of my state of health. Something might happen to me before our big battle was finished. By putting it in the trustees, I set it up where it was a self-perpetuating organization, and therefore the hazard of any person's death or incapacity would not be loaded on to this operation.

Q. Mr. Potter, I find in glancing through my papers a [407] photostatic copy, or I guess it is the original"——

The Court: How many exhibits are there, Mr. Cuningham?

Mr. Cuningham: They are all together, sir. I think it will just take a minute. They were identified separately in the deposition and here they seem to be marked with one number, Exhibit 3-KKK, seven sheets in all. They are a little long.

The Court: Do you want the jury to look at them?

Mr. Cuningham: They are a little long. I think a later time would be better. I have no objection.

The Court: Go ahead with the question.

Mr. Cuningham: ——"being apparently a letter on the letterhead of the Potter Refrigerator Company and attachments. Can you identify that as coming from your files?

(Deposition of T. Irving Potter.)

A. Oh, yes, that comes back to mind. I had completely forgotten it."

Mr. Cuningham: I offer that in evidence.

Mr. Ramsey: We would object to it on the ground of relevancy.

The Court: All right. Let me take a look at that. I will take that one under advisement.

Mr. Lucas, are you going to ask the questions?

Mr. Lucas: Yes, your Honor.

"Cross-Examination

By Mr. Ramsey:

Q. Mr. Potter, you were testifying about a Trust Agreement. [408] Is that in writing?

A. Yes, sir, that is in writing.

Q. Will you produce it, please?

The Witness: Mr. Cuningham has it, I think. We can get it for you.

Mr. Cuningham: Mr. Potter's secretary has handed me a copy of the photostatic—a photostatic copy of a three-page letter, dated April 4, 1950, apparently a letter agreement, and I hand it now to Mr. Ramsey.

Q. (By Mr. Ramsey): Mr. Potter, I think it should have been handed to you. Would you identify that, and is that the first Trust Agreement to which you referred?

A. Yes, that is the Trust Agreement.

Q. You are handing me a photostatic copy thereof? A. Yes, sir."

(Deposition of T. Irving Potter.)

Mr. Lucas: I ask that this be marked for identification as Defendants' Exhibit 120-A.

The Court: Go ahead.

Mr. Lucas: "Q. Mr. Potter, you started to say something about Potter and Halsey.

A. Yes, I don't know what you are referring to. There is such a firm.

Q. And you are interested in that?

A. I am President of it, sir.

Q. And presently? [409] A. Yes.

Q. For how long a period of time?

A. Since its organization.

Q. That was when?

A. I believe that that was approximately 1938. I am not certain. It is necessary to be certain—if it is necessary, I can have the record looked up.

Mr. Ramsey: I think that is satisfactory.

Q. You say that that firm of which you are president was retained and paid by the so-called Syndicate owners?

A. The individual members.

Q. And to do what?

A. To represent their interest in the Potter Enterprises, if I can call it that, because that is the patent, the commercial effort and so forth.

Q. What are you supposed to do?

A. Do everything we could to advance their interests on a service basis.

Q. Substantially carte blanche?

A. What?

(Deposition of T. Irving Potter.)

Q. Are you operating—I said carte blanche——

A. I know what you mean. Yes, sir.

Q. Would you say that your firm and you were in a management position over their interests or how would you define it?

A. I would say in an advisory position. [410]

Q. And you are paid to do that?

A. They pay us a monthly fee.

Q. And is that continuous?

A. That has continued over a long period of time, sir.

Q. Is that a substantial sum? I don't want to pry into your business, so I don't care to know exactly how much it is.

A. In finances that is a relative thing, because one man might think $1,000 is substantial; another man might think it is chicken feed."

Mr. Cuningham: I object to further questions along this line as having nothing to do with the validity or infringement of the Potter patent.

Mr. Lucas: "Mr. Ramsey: I think that it will be connected up."

Mr. Cuningham: I object, your Honor.

The Court: I am going to overrule the objection on the ground it goes to the witness' interest.

Mr. Lucas: All right.

"Q. Then I will ask you how much is your fee?

A. That has varied.

Q. From what to what?

A. That would vary from $10 a month from

(Deposition of T. Irving Potter.)

some men up to as high as $100 a month from others.

Q. How many members are there?

A. That has varied over the years. [411]

Mr. Cuningham: May I note a continuing objection, Mr. Ramsey, to this whole line of testimony about Potter and Halsey?"

Mr. Cuningham: I'm sorry; it will be overruled.

Mr. Lucas: "Q. At the present time, how many members are there?

A. I would say in the neighborhood of between 90 and 100.

Q. What is the top number?

A. Do you mean over the period of years?

Mr. Ramsey: That is correct.

A. (Continued): I would say approximately 200.

Q. It has never exceeded that?

A. I can't say accurately, sir.

Q. I will ask the question again so that there will be no confusion. What are the total number of so-called members of your syndicate, the top number?

A. You would have to define the period, sir."

Mr. Lucas: Top of page 279 he is not objecting.

Mr. Cuningham: I have no objection.

The Court: Oh, do you want to go—on to, "That is the reason why I rephrased it"?

Mr. Lucas: No, sir; just the paragraph above that, "The Witness."

(Deposition of T. Irving Potter.)

The Court: Go ahead.

"The Witness: Your question is confusing, because part [412] of the question originally—you originally asked about the number of people who employed the services of Potter and Halsey. Now I don't know whether you want the people who employed Potter and Halsey or if you want to know the number of people who purchased interests in the pump. That is confusing.

Q. That is the reason why I rephrased it. Please give us the number of people first who are syndicate owners, the top number?

A. You will help my thinking if you will make that clear. Thank you. To the best of my knowledge, we sold about 250 interests only in principle in our pump patent, that is, I sold personally. Following some of those sales, some outsiders came in and bought up some of those interests on their own and resold them. They would buy a larger interest and break it up into parts and they would resell it. I had absolutely nothing to do with it, but on the books of the company those transfers, I think, built up close to around the neighborhood of around 500 people, of which I personally was responsible for selling somewheres around the 250 mark—maybe 225 or 250. But due to these outsiders breaking in and speculating in our interests, they brought in a lot of these other people into the picture. I had no means of stopping it. I protested, but it didn't do any good.

(Deposition of T. Irving Potter.)

Q. Did anyone other than you sell these original interests [413] on your behalf?

A. I employed some salesmen. Their job was to go out and find people who stated that they would be interested in such a thing or could be interested. Those salesmen explained what it was all about. None of them had authority to close a deal until I okayed it. I even endeavored in most cases to meet those people personally and explain to them that if they came into this picture with me, they would have to rate it as a speculation. Until they could assure me that they were able, without any difficulty on their part, to afford such a speculation, I would not take them in. That was in most cases. Later on——

Mr. Ramsey: I only asked the number.

A. (Continued): I am trying to give you the picture.

Q. You say there were seven salesmen?

A. Several.

Q. How many?

A. It varied from time to time.

Q. The top number?

A. I would say seven or eight at one time.

Q. Was Mr. Bronaugh one of them?

A. Mr. Bronaugh started on that and failed. He was hired as a salesman for that, and he failed.

Q. How long did he act as a salesman?

A. Not over two months. Probably it was [414] less.

(Deposition of T. Irving Potter.)

Q. That was where?

A. He was hired in Portland and sent to the Seattle office.

Q. Did he later attempt to interest capital in the purchase of these shares?"

Mr. Lucas: You are not objecting?

Mr. Cuningham: No.

The Court: All right.

"A. No, sir, he did not.

Q. You are quite confident of that?

A. Yes.

Q. He didn't come to Buffalo and attempt to sell shares? A. No, sir, he did not.

Mr. Cuningham: Please note a continuing objection to all this as to the selling of shares in the pump patent or any other patent. I think it is wholly irrelevant, and immaterial.

Mr. Ramsey: May I proceed?

Q. The number of shareholders that you referred to as being somewhere in the neighborhood of 200, are those that are paying this service fee to your firm?

A. I told you that other people were brought into the picture by outsiders who bought interests and broke them up into smaller parts.

Q. I don't care where they came from. Are they paying"——

Mr. Cuningham: No objection. [415]

"A. I am trying to get your question so that I can answer it strictly in accordance with your question.

(Deposition of T. Irving Potter.)

You speak of shareholders. I don't understand your question from that standpoint. I want to give you a correct and exact answer.

Originally people bought interests in the Potter Pump Patent. That was a piece of property. It was not shares. We got in the habit of calling them syndicate members. When the Potter Refrigerator Corporation was formed, to which I testified, I testified to the fact that my assets, everything I had, was turned over to a lawyer. He organized the Potter Refrigerator Corp.—or, rather—I am sorry—the Refrigeration Patents Corporation. I must have misstated that in my previous testimony. It was the Refrigeration Patents Corporation. And he caused stock of that company to be distributed to these original people who bought interests in the pump.

In proportion to their interests in that pump patent, thereby they became shareholders, as you call it, in the Refrigeration Patents Corporation, and from that time on the syndicate, as such, ceased to function. The Refrigeration Patents Corporation——

Q. With your explanation, how many of such people were there who were employed by Potter and Halsey?

A. Of those stockholders of Refrigeration Patents Corporation? [416]

Q. As you have defined it. You have defined the relationship.

(Deposition of T. Irving Potter.)

A. I would say probably at a maximum about 200 or thereabouts.

Q. Thank you. You spoke of the fact that on September 22, 1950, Mr. Bradkin of Kling and Company came to see you? A. Yes, sir.

Q. In what capacity were you then serving so far as these stockholders were concerned?

A. The same capacity, sir.

Q. What, if anything, did you do thereafter with regard to Mr. Bradkin?

A. The Continental Company or the promoter of it had failed to perform. Mr. Bradkin brought me down and introduced me to Mr. T. Roland Burner, and I discussed the question of financing the Continental Company with him.

Q. Mr. Burner is the attorney of record in this case? A. Yes, sir.

Q. Then what did you do with regard to this matter?

A. Mr. Burner said that he would take the matter up with some of his clients and see whether he could interest them in financing our situation.

Q. Did you have a number of verbal conferences with Mr. Burner? A. I did.

Q. Covering what period of time? [417]

A. I would say from memory probably over a period of a month.

Q. How many conferences?

A. I don't remember exactly. It was several.

Q. Over ten? A. I don't think so.

(Deposition of T. Irving Potter.)

Q. You say you do or don't think so?

A. I don't think so.

Q. Over five?

A. I can't tell you that. I know it was several. I can't tell you exactly.

Q. I ask you whether or not on November 1, 1950, you addressed a letter to Mr. Burner, and whether that set out an outline of your conversations and your agreement. This is identified as" Plaintiff's Exhibit 120-B "for identification and dated 6-14-1951.

A. This is the first time I have read that since it was written. This is so blurred on the last page that I can't decipher it. But that letter I recognize, sir.

Mr. Ramsey: Let the record indicate that the witness took seven minutes and a half to read the letter and to read it very carefully.

Q. Did you write that letter?

A. To the best of my belief, I did.

Q. Did you send a copy of that to Mr. Burner?

A. I must have. [418]

Q. Does this letter constitute the general agreement under which the Moist Cold Corporation was formed? A. In general, yes.

Q. How does it differ?

A. I don't get what you mean—'How does it differ?'

Mr. Ramsey: These are your words. I am trying to understand you. These are your words. You said

(Deposition of T. Irving Potter.)

it does in general. I asked you how it differs. You are the only one who knows.

A. (Continued): There were other things in the minds of the Trustees beyond what was there, things that weren't necessary to put in.

Q. Do you have a copy of this letter in your records here? A. I should have.

Q. Would you produce it, please?"

Mr. Cuningham: I object to it, your Honor, as irrelevant and I also object to it as not proof.

The Court: Well, I don't know whether it's relevant or not, and so I am going to pass that and take it under advisement along with the other exhibits.

Go ahead. Are you all through? Are you over to 290?

Mr. Lucas: Could I speak to Mr. Ramsey, your Honor, please?

The Court: Yes, you may. [419]

Mr. Lucas: If your Honor please, we will start on page 290.

Mr. Cuningham: That means that you are not offering the deposition?

Mr. Ramsey: The reason we are not is they are big——

The Court: No; we don't have to have any reason. No speech.

Mr. Lucas: "Q. On your direct examination, Mr. Potter, you referred to that certain affidavit signed by you November 5, 1932, to support a petition to revive, which application was abandoned by reason of failure to respond to the Patent Office

(Deposition of T. Irving Potter.)

action dated April 9, 1932. In that affidavit you stated, 'While I was in Portland it was my practice to consult with him personally and advise him in the preparation of amendments to my application.'

The 'him' referred to was your patent attorney?

Mr. Birkenbeuel: Yes.

Q. Continuing it reads, 'Owing to a long experience in patent matters, I felt that I could analyze citations against my applications and assist in overcoming references by argument or amendment.'

I ask you, do you remember whether this affidavit was put in after the second action of the Patent Office and the application in the Bronaugh-Potter matter?"

Mr. Cuningham: I move now to strike that as entirely [420] irrelevant as stated in the record and also on the ground since the objection was made I believe it relates to a defense that has been given up by my friends on the other side.

The Court: Is that correct?

Mr. Ramsey: I don't believe so. It goes to the question of the qualifications of this witness who has been testifying on patent matters.

Mr. Cuningham: No, your Honor; the defense, as I understand it, is the one that the Patent Office was wrong in giving two or three weeks' extension of time to file an answer to an action, and I understood that was given up as not worth pursuing. That's what this affidavit was offered for, it was to procure the delay in answering the patent action of three or four weeks back in 1932.

(Deposition of T. Irving Potter.)

Mr. Ramsey: You mean that is the position it occupies in the file wrapper?

Mr. Cuningham: Yes.

Mr. Ramsey: But you are not saying that's the purpose that was referred to here?

The Court: Well, I don't want any argument between counsel. You state the basis.

Mr. Ramsey: The relevancy is that this affidavit says he has long experience in patent matters.

Mr. Cuningham: I don't know how that is relevant. The validity of his patent, he can have an invalid patent or not [421] infringed if he is experienced in patent matters.

Mr. Byron: Your Honor, there is just a little more to that. Let me speak a little piece. There is an affidavit here of a certain date in which he, among other things, says that this application will have to be revived. We cannot file a new application. If we do file a new application it will have been filed more than two years after——

The Court: Yes, I understand that.

Mr. Byron: We have a defense here that they are putting in new matters more than two years after certain refrigerators were sold.

Mr. Cuningham: Well, if your Honor please, this affidavit has nothing to do with that matter, as I understand it. Certainly it isn't proof that there were any refrigerators sold.

Mr. Byron: Mr. Potter said that under oath.

Mr. Cuningham: It is not binding even if he

(Deposition of T. Irving Potter.)

did, and even if there have been it makes no difference. But, anyhow, it's not binding on the plaintiff here.

The Court: Well, I will take that under advisement, Mr. Cuningham, and I will rule later as to whether the statements made in the affidavit are admissible.

Mr. Lucas: "Q. Now I ask you if you remember whether this petition to revive in your supporting affidavit was filed after the first or second action of the Patent Office? [422]

A. That I wouldn't know.

Q. To refresh your memory, I will read the affidavit into the record."

The Court: I think that at this time we will hold the reading of the affidavit into the record until I pass upon the admissibility.

Mr. Cuningham: All right.

The Court: Where do you go from there?

Mr. Lucas: 296, your Honor, in the middle of the page.

Mr. Cuningham: That's correct, I think.

Mr. Lucas: "'With said letter he sent a copy of office action (Paper No. 4) rejecting all the claims.'"

The Court: Well, I don't think that comes in now because it refers to the affidavit. Go to 297.

Mr. Lucas: "Q. Have you had a long experience in patent matters, Mr. Potter?

A. From an inventor's standpoint, yes. Not from a lawyer's standpoint.

(Deposition of T. Irving Potter.)

Q. And you understand what office actions are?

A. Yes.

Q. Do you understand what claims are?

A. Yes.

Q. What amendments or references are?

A. Yes."

Mr. Cuningham: Objection on the ground that it's [423] irrelevant, immaterial.

The Court: Objection overruled.

Mr. Byron: It goes to the very heart of this situation.

The Court: All right.

Mr. Byron: He is O.K. and they proved his claims when he originally filed and the application when it's originally filed, the specification describing what he regarded as his invention at that time. That's all very pertinent here.

The Court: I think the man can tell how much he knows about his patent and patent law, particularly when he has acted as an adviser for 200 investors.

Mr. Lucas: "Mr. Ramsey: You do understand those things, Mr. Potter? A. Yes.

Not as a lawyer. I understand it from my experience as an inventor."

Mr. Cuningham: I move to strike.

The Court: Objection overruled.

Mr. Lucas: "Q. You signed this oath, did you not? A. Yes.

Q. You understood the oath, did you not?

(Deposition of T. Irving Potter.)

A. I did.

Q. And you understand oaths, do you not?

A. I think I do.

Q. But you don't know what Paper No. 2 or Paper No. 4 mean in [424] your oath or in your affidavit?"

Mr. Cuningham: That is objected to. He has not so testified.

The Court: "In your affidavit, do you refer to Paper No. 2? Do you know what Paper No. 2 is?" Did you read that question?

Mr. Lucas: Yes, sir; I did.

The Court: All right. Go ahead.

The Bailiff: "A. At the time I signed that affidavit, Mr. Bond was my attorney. He must have pointed out to me at that time what Paper No. 2 was. After all these years, I cannot identify in my mind Paper No. 2. That is asking too much. Undoubtedly I knew what that Paper No. 2 was. He probably put that paper in front of me.

Q. Do you know from reading your affidavit that there was one office action that was sent to you? A. Yes.

Q. And that was sent to you in due time, referring to your affidavit? A. Yes.

Q. Now, in this portion that I asked you about originally, where you said when you were in Portland it was your practice to consult with your attorney personally? A. Correct."

The Court: One second. I think that all of this

(Deposition of T. Irving Potter.)

testimony [425] is relevant to the affidavit and either it should come in in its entirety or it should be deleted. And I am going to ask you to refrain from asking any more questions dealing with this issue until I have made my ruling.

Mr. Lucas: If your Honor please, may we go to the bottom of page 303?

The Court: That's right.

Mr. Lucas: "Q. While you were in Portland—possibly I had better get a chronology of your activities, so that there will be no confusion, and we will be able to move along.

You are now about sixty-eight years of age, Mr. Potter? A. Yes, sir.

Q. And you were born in Oakland, California, in 1887? A. Yes, 1887.

Q. You lived in California until you were fifteen or sixteen years of age? A. Correct.

Q. And in 1902 when you were approximately fifteen years old, you moved to Portland, Oregon? A. Approximately that.

Q. You lived in Portland, Oregon, until about 1915 or 1916?

A. There was a short interval in there where I went to San Francisco with my parents, and then returned—I returned to Portland.

Q. Except for that time interval, you were living in Portland, [426] Oregon? A. Yes.

Q. You attended high school in Portland?

A. I did.

(Deposition of T. Irving Potter.)

Q. And the time that you went to San Francisco was in 1916? Is that correct?

A. Again, to pick a date out, I find it difficult. I am not criticizing.

Q. It isn't important. Let us pass on to another thing. On June 20, 1910, were you one of the incorporators and First President of the Coin Machine Manufacturing Company? A. Yes, sir.

Q. And how long did you occupy that position?

A. I would say until 1916, approximately. I might be off a little.

Q. Was that immediately preceding your trip to San Francisco?

A. No, I had been in San Francisco before that company was incorporated.

Q. Then you would say from 1910 to 1916 you were associated with the Coin Machine Manufacturing Company? Were you President at all times during those periods of time?

A. Toward the end, I was not President.

Q. When did you then leave Portland?

A. I would say somewhere around 1917. Again, my mind works on relations, and if I take a single date without checking it [427] with relation, but I would say roughly about 1917.

Q. How long were you in San Francisco?

The Witness: Are you inferring that—I am trying to understand or co-operate with you—but you are inferring that I went to San Francisco after 1917.

(Deposition of T. Irving Potter.)

Mr. Ramsey: You told me that. I asked you how long you were in San Francisco when you did go.

A. I said I went to San Francisco before the date you speak of with my parents, and then I returned to Portland.

Q. And you were associated with Coin Machine in Portland——

A. After I returned to Portland.

Q. That was from 1910 to 1917, you say?

A. Approximately.

Q. Then where did you go?

A. Then I went East.

Q. By East you mean what?

A. I first went to Chicago.

Q. How long were you there?

A. Several months.

Q. Then where did you go?

A. Then I went to Detroit.

Q. How long were you there?

A. Several months.

Q. Then where did you go?

A. Then I came to New York [428]

Q. How long were you in New York?

A. I was in New York quite a while, and from New York I moved to——

Q. How long were you in New York?

A. I would have to find some basis for checking my memory.

Q. Would you say approximately one year?

A. That is reasonably close.

(Deposition of T. Irving Potter.)

Q. Where were your offices?

A. If I remember correctly, I think around 42nd Street at what they at that time called the Aeolian Building, the piano people.

Q. During the time that you were in Chicago and Detroit, what were you doing?

A. I was trying to see whether I wanted to make my permanent headquarters and enter business there. [429]

Q. When you later moved to New York, what were you doing?

A. I opened an office as a Consulting Engineer.

Q. Do you mean to use the word "Engineer" advisedly?

A. Not from the standpoint of a college degree.

Q. Did you have a high school degree?

A. I did not finish high school, sir.

Q. But you were consulting on some basis with clients or customers?

A. I was trying to build up a clientele.

Mr. Ramsey: Thank you.

Q. Then you moved where?

A. Then I moved to Orange, where I had my residence.

Q. And there under what name did you do business in New York? A. My own name, sir.

Q. What name did you do business under?"

Mr. Cuningham: That I thought we had agreed to come out.

Mr. Lucas: That is not on my copy. Will you go to the answer in the middle of Page 308.

(Deposition of T. Irving Potter.)

"A. A corporation was formed by those gentlemen and some others that I was introduced to, called the Federated Engineers Development Corporation, and they put me in as President of that corporation. [430]

Q. Was that incorporated in December 11, 1919?

A. It could have been.

Q. You say that prior to the date of incorporation you were not doing business at West 44th Street under the name Engineering Development Company? A. I did not say that.

Q. I am asking you that.

A. It may be that when the Federated Engineers Development Company was formed the office might have been associated or in my office at that address.

Q. How long were you associated with the Federated Engineers Development Corporation?

A. I was President of that corporation until somewhere around the latter part of 1924 or the first part of 1925, I think.

Q. I ask you whether in 1924 you organized a Delaware corporation, offices at 1155 Broadway, New York, New York, to sell stock in Fedco Number Plate Corporation: is that correct?

A. I was one of the incorporators, I believe. About that I am not certain, but I believe I was one of them.

Q. Did you hold an office in that corporation?

A. Of the Fedco Number Plate?

Mr. Ramsey: Yes.

(Deposition of T. Irving Potter.)

A. I do not believe I did; no, sir.

Q. After that where did you go? [431]

A. I was still with the Federated Engineers.

Q. When did you return to Portland?

A. In 1925, if I remember correctly. I can check my memory on that. In 1925, yes.

Q. During the time you say you were with Federated Engineers Development Corporation, you were living in Orange? A. Yes.

Q. And did business in Hoboken, New Jersey?

A. We were on the dividing line between Hoboken and Jersey City, and below us was Hoboken, and I think that we were right on the line. I am not absolutely certain whether we were in Jersey City or in Hoboken. We were closer to Hoboken.

Q. Wherever you were, you did business there for ten years? A. Yes.

Q. When you returned to Portland you did business originally under your name, T. Irving Potter?

A. When I returned to Portland in 1925, yes.

Q. And later you formed Refrigerator Sales Company?

A. The Potter Refrigerator Sales Company was formed.

Q. Is that a corporation? A. Yes.

Q. You are not confusing that with Potter Refrigerator Corporation, are you?

A. No, sir. [432]

Q. They are two separate corporations?

A. Yes.

(Deposition of T. Irving Potter.)

Q. Now, after that chronology and your statements that you had a long experience in patent matters, did you have experience in patent matters in many of these companies with which you were associated during this period of time, from 1910 to 1925?

A. My experience in patent matters as an inventor—and I want to emphasize as inventor, not a lawyer—dated from my early youth when I was making inventions, and some of which I patented.

Q. We are talking about experience from or in patent matters.

A. As an inventor, yes. That continued through the years.

Q. Well——

A. (Continued): I had many inventions.

Q. Prior to 1925 how many inventions did you file applications for patents on?

A. Oh, before 1925——

Q. When you returned to Portland.

A. This is only a guess. I would say thirty or thirty-five. That is just a guess.

Q. I presume you did business with a number of different attorneys?

A. My early work was handled by a firm in Washington, [433] D. C., the firm of Church & Church. Before that I think my first efforts to get a patent was through Munn & Company. They owned the Scientific American, and they had a Patent Department where they took patents for in-

(Deposition of T. Irving Potter.)

ventors. So my first experience was with Munn & Company, and as a youth I was impressed with the Scientific American, so I thought this must be good.

Mr. Cuningham: How old were you, Mr. Potter, approximately?

A. Oh, I was in my eighteens, or my teens.

Mr. Cuningham: Twenty or twenty-one?

The Witness: Yes.

Q. (By Mr. Ramsey): Now in connection with those patent applications, and any patents that were obtained thereon, did you consult with your attorneys?

A. If they were within physical reach, I did.

Q. Did you write to them or telephone them?

A. You are recalling to my mind now things that I have not thought of for many years.

Mr. Cuningham: Please answer the question, Mr. Potter.

A. Yes.

Q. And that was the background of your statement, that through thirty or thirty-five patents you had watched them closely, generally, in the preparations stage, the application stage? [434]

A. At the beginning I was a youth. I had an invention. I didn't know patent practice, so I didn't encroach on the first ones. As I went along, I gathered more experience and therefore my contact with the attorneys became more intimate.

Q. Fine; but you spoke of a practice, and you are the only one who knows. I am trying to find

(Deposition of T. Irving Potter.)

out when the practice began of consulting with your attorneys and advising them.

A. I can't say when it began. It was a gradual growth of experience.

Q. Well, would you say prior to 1910?

A. Yes.

Q. And since 1910 to 1925 you did follow that practice?

A. Yes, I would say you are accurate on that.

Q. Fine. And you read carefully all applications that were presented to you for signature?

A. You are so specific.

Q. I am speaking of your practice.

A. (Continued): I tried to take an interest in it and follow it, but at this late day and age, I can't say in each and every case I read everything carefully. That is what you are asking me to say. I am talking in terms of principle."

Mr. Lucas: If your Honor please, I am concerned about [435] the next question, the affidavit.

The Court: We will omit that for the time being.

Mr. Luas: We will go to the top of Page 314.

"Q. And you have testified as to the length of your experience in following that practice and your connection with the applications——

A. As an inventor.

(Deposition of T. Irving Potter.)

Q. As an inventor. You are not a lawyer, are you? A. Not remotely.

Mr. Ramsey: Thank you.

Q. And in that practice, you analyzed the citations, as you say. I suppose that means that you read the patents that are cited by way of rejection? A. To the best of my ability I did.

Q. And then give the results of your determination to your attorney for his——

A. I don't know how you or what you mean by determine, but I formed conclusions, and I gave him my picture.

Q. Well, following that practice, did you give Mr. Birkenbeuel the advantage of your long experience in connection with the amendment filed over his signature on April 4, 1932?

A. I could not have, because I was in Buffalo in 1932. I worked with Mr. Birkenbeuel at the beginning on that by explaining the box, its functions. We had what we called [436] the McChesney Box in front of him. I explained to him that box. I asked him to make the application for it. Now I left Portland in the spring of 1931. Mr. Birkenbeuel carried on from his standpoint, but that meant a physical separation between Birkenbeuel and myself. I was in Buffalo, and he was in Portland.

Q. Then you say that your usual experience, you didn't help with the amendment then in April 4, 1932, in the case in question?

(Deposition of T. Irving Potter.)

A. I would have to see what that amendment was. I can't carry all those things in my mind, specifically.

Mr. Ramsey: I don't blame you.

Q. Before you filed the application for patent, did you make a preliminary examination? I am talking about the patent in suit—pardon me, Mr. Byron corrects me on that. It is the original patent, on which the reissue is the one in suit.

A. I do not remember whether we had a patent rese.. ·h on that or not.

Q. When did the Anderson patent, U. S. Patent No. 1,439,051 come to your attention?

A. That was while I was in Buffalo, and at this moment I cannot remember how that came to my attention. I know it came to my attention. At this moment I don't remember how it came to my attention. [437]

Q. Mr. Bronaugh was in Portland?

A. Yes.

Q. And he might have had a search either before or afterwards, and that is the reason you cannot remember?

A. Mr. Bronaugh would not have that within his province.

Q. So that any search made would be under your direction rather than Mr. Bronaugh?

A. Yes, if it was made, it would have been under my direction, and I do not say it was not made or that it was made. I don't remember.

(Deposition of T. Irving Potter.)

Q. Can you fix a time when you were in Buffalo when this Anderson patent was first brought to your attention? A. During 1931, sir.

Q. The first part of the year, or the latter part of the year?

A. To the best of my ability, I would say probably in the middle of the year.

Q. Would it help you to be reminded that you bought this patent according to your knowledge and your testimony, October 2, 1931?

A. Yes, sir.

Q. How long before that had you known of the Anderson patent?

A. A very short time. It might have been months, I would say. [438]

Q. You don't know whether Mr. Birkenbeuel called this patent to your attention or not?

A. I wish that I could remember, but at the moment I can't place it in my mind.

Q. Why did you buy the Anderson Patent No. 1,439,051?"

Mr. Cuningham: The answer is on Page 319.

"A. I bought that patent because it seemed to cover one of the elements which we were using in our Potter Box, and that was the circuit, the refrigeration circuit that we were using.

It was easier; I mean cheaper and quicker to buy that patent than it would be to hold up our

(Deposition of T. Irving Potter.)

production plans and redesign our refrigerator circuit.

Q. Please state what that circuit was that we are concerned with, controlled by the Anderson Patent?

A. That was what I would call a series circuit."

Mr. Cuningham: Now, if your Honor please, I think, as I recall this from now on, and subject to correction if I am in error, this relates solely to the Anderson patent. I think it is entirely improper cross-examination; not within the scope of the direct examination.

The Court: Did he refer to the Anderson patent in his testimony in chief? [439]

Mr. Cuningham: I think, your Honor, there may be some reference to it because the portions that we have omitted covered the period when he bought it. I am not sure. We omitted a great chronological block of this testimony.

Mr. Byron: This testimony, your Honor, is very pertinent. Mr. Potter testified that he purchased this Anderson patent because it showed a series circuit.

Mr. Maguire: It seems to me——

Mr. Byron: May I make my statement?

Mr. Maguire: I am just suggesting that you should not make your statement. This may not be the proper place in which to make your statement.

Mr. Byron: I will not say anything that is out of order.

The Court: It is almost 12:15. Mr. Byron, will you please take up your objection a few minutes later. We will excuse the jury now and I shall then pass upon the admissibility of that testimony.

Ladies and gentlemen, we will take a recess until 2:00 o'clock.

(Thereupon, the jury retired for the noon recess, and the following proceedings were had without the presence of the jury.) [440]

The Court: Proceed.

Mr. Byron: Mr. Potter testified that he bought this Anderson patent for one reason, that it had a series circuit which he was embodying in his Potter refrigerator. The testimony that the other side wishes have deleted is along this line, your Honor. We show, and Potter admits, element for element, element in the Potter arrangement, same element in Anderson. We go right down the line, and he admits that all of the elements that I refer to in the Potter are found in Anderson, and he bought that patent because he was infringing, not because of a series circuit but because of the whole organization, and it is very pertinent on the question of infringement.

The Court: I want to say this. I have become convinced here since the beginning of this case that most of the attorneys operate under the theory of Pike Davis; that is, you object to evidence because it is harmful regardless of whether it is admissible or not, under the rules, and you try to get in evi-

dence that is helpful regardless of whether it is admissible.

As I see this particular testimony, Mr. Potter was able to testify concerning the patent and the reach of the claims because he was one of the original inventors. It was on that basis that we prevented the testimony of Mr. Bronaugh when I questioned his qualification. In addition [441] to that, we have Mr. Potter testifying that, on his direct examination, that he is a management consultant or a consultant with reference to this patent. He might not be qualified, in spite of his statements, to talk about the Anderson patent, but he is qualified to compare the Anderson patent to the Potter patent particularly. This evidence, if it shows what Mr. Byron says it shows, is admissible on the question of impeachment. He says he bought it because it shows a circuit, but if they can prove that he bought it because the Potter patent infringed this patent or he felt it did, I think it is quite cogent testimony. Iam going to rule that that is admissible.

Now, tell me more about that affidavit. What is the relevance? Perhaps I had better hear from Mr. Cuningham first. You are objecting to that affidavit, which I have not read recently, but is that the affidavit that was referred to in the General Electric case?

Mr. Cuningham: It was referred to in both the General Electric and the Stewart-Warner cases. It is in the Stewart-Warner record, your Honor.

The Court: What defense does that have to do with?

Mr. Cuningham: The affidavit was offered——

The Court: On the reinstatement petition?

Mr. Cuningham: Pardon?

The Court: On the reinstatment petition? [442]

Mr. Cuningham: Yes, your Honor.

The Court: I ruled some time ago that was abandoned by the defendants in the defense in the original case or in our first case before it went to the Court of Appeals.

Mr. Cuningham: I am sure, your Honor, I cannot remember. It was abandoned recently, then, over again because it was within the last two weeks.

The Court: As I understand it, Mr. Byron does not want to use it for that purpose but merely for admissions contained in the statement.

Mr. Byron: That is right.

The Court: For what purpose?

Mr. Byron: I can tell you exactly, your Honor.

The Court: Proceed.

Mr. Byron: Mr. Potter took the position that he had to have his application reinstated rather than dropping that and filing another application, and the reason he gave was, "If I file another application, the filing date will be more than two years after I sold a refrigerator embodying my invention, and, therefore, I could not come in under the law because I could not get a valid patent. There would be a statutory bar because I did not file the application within two years after I made a sale." Now,

it is on that.

The Court: What does that prove or disprove in this [443] case?

Mr. Byron: Well, for the first time, two years after—more than two years after he made that sale he injects for the first time descriptions about this differential insulation and also about this moist cold feature. There are no claims in this original application about moist cold at all.

The Court: What difference would that make, Mr. Byron? How would Mr. Potter's statement of what he regarded the law—and I understand it is the law——

Mr. Byron: He does not make a statement with respect to the law. He takes oath that he sold a refrigerator embodying his invention on a certain date. Now, that date is more than two years, under his oath, more than two years—his application—more than two years after these were sold, that is, two years after he introduced into his application these features, the moist cold feature in the claims and the differential insulation into his claims.

The Court: I do not understand that yet.

Mr. Byron: It is an entirely different defense.

The Court: You are even now. I do not understand Mr. Cuningham's original statement on the patent, and I do not understand your claim here. I am going to go back to the one statement that I made. Don't you have independent evidence to show that this box was constructed some two [444] years before the date of the application?

Mr. Byron: Well, before, two years before amendments in the application bringing in for the first time these alleged patentable features.

The Court: To what defense does this testimony go?

Mr. Byron: Statutory bar; more than two years.

The Court: Is it a legal bar? Are you going to submit it to the jury?

Mr. Byron: It is a statutory bar, yes, it is——

The Court: You are going to submit that as an issue to the jury?

Mr. Byron: Yes—well, submit it to the Court.

The Court: Either it is a question of fact or it is not; and if it is a question of fact, it goes to the jury.

Mr. Byron: Yes. I think it is largely a question of law, your Honor.

The Court: What page is it on? Well, I will take a look at it, and I will try to make a determination by 2:00 o'clock. We will come back a little early and then we will look at it, and I will pass upon all these issues.

(Discussion off the record.)

The Court: I did not read all of the Bommer deposition so I cannot tell what Bommer testified to on his direct examination. As I read the recross, Mr. Byron is now impeaching Bommer on something that he testified to in the [445] Stewart-Warner case, an inconsistent statement. Now, you cannot ask on recross a question for the first time, but

what I would like to know is, did Mr. Bommer make a statement which was in conflict with the testimony he gave in the Stewart-Warner case.

Mr. Cuningham: If your Honor please, perhaps I can help. I will withdraw my motion to strike all of the so-called impeaching—and I do not agree that it is impeaching—testimony, and it may go in. I withdraw the motion to strike.

The Court: Fine. I do not know whether that came in originally or not. If he did make an inconsistent statement, obviously it is admissible. We will recess until 2:00 o'clock.

(Thereupon, a recess was taken until 2:00 o'clock p.m.) [446]

Afternoon Session

(Court reconvened, pursuant to adjournment, at 1:45 o'clock p.m., and the following proceedings were had herein:)

(The following proceedings were held in Chambers out of the presence of the jury.)

The Court: You wanted to make a statement concerning the deposition, didn't you?

Mr. Byron: In connection with the reading of the Potter deposition, we were at page 320 when a recess was taken and a discussion followed to the Court as a result of which defendant concluded that they would not read at this time before the jury pages 320 up to the middle of page 326. That is up to the time that Mr. Byron cross-examined.

The Court: Well, do you want to read from 326 to the end of the deposition?

Mr. Byron: Yes, sir.

The Court: Well, what about the portions that I reserved prior to page 326, dealing with the affidavit written by T. Irving Potter and the questions concerning the affidavit?

Mr. Byron: Well, we find that the affidavit is in the file wrapper of the original Potter patent and that is in evidence or will be, and we can refer to that affidavit from [447] the file wrapper.

The Court: Now, I don't understand what you mean, you are "refraining from reading at this time." Do you mean you reserve the right to read pages 320 to 326 at a later time or are you——

Mr. Byron: I think we can waive that, your Honor.

The Court: Waive it entirely?

Mr. Byron: Yes.

The Court: Mr. Cuningham, you heard the statement of Mr. Byron. He merely wants to put in the evidence between 326 and the end of the deposition, about five pages.

Mr. Cuningham: That is still subject to my motion to strike.

The Court: I am going to rule that the evidence is admissible and you may read that portion of the deposition.

Mr. Cuningham: Have you now ruled, or do you want to hear argument on it?

The Court: I have ruled, but you may have an exception to my ruling.

Mr. Cuningham: Yes, sir.

The Court: It's almost 2:00 o'clock. We are not going to permit you to make an offer of proof at this time.

Mr. Cuningham: Yes.

The Court: But you will be given an opportunity at a later time. [448]

Now, I want to rule on two other documents. Exhibit 3-KKK, as I understand it, the defendant has objected to the admissibility of this exhibit. On what grounds? What are you objecting for, on the ground of hearsay?

Mr. Ramsey: Oh, yes. That one on hearsay.

The Court: What do you claim for this, Mr. Cuningham?

Mr. Cuningham: Well, your Honor, I don't think it's hearsay, it's part of the business records of the Potter Refrigerator Corporation.

The Court: Well, it's a survey made by an advertising agency.

Mr. Cuningham: It shows the rating of the different refrigerators as of the time of the agency, and I think it is very significant as to whether or not we had fulfilled in the open marketplace the promises of our patent. [449]

The Court: How are they going to be able to see the study and find out how large a sample was taken and whether that sample was adequate and various things surrounding that, the information therein contained?

Mr. Cuningham: I do not think, if your Honor please, that is essential. They have their right to bring their own proof in. I would not object to any such study.

The Court: How could they bring their proof in at this late date when that was written, how many years ago?

Mr. Cuningham: They can have their case.

Mr. Maguire: 1935.

The Court: 1935.

Mr. Maguire: I think it does have a ground of admissibility, your Honor, quite aside from what has been suggested. This is one of the things upon which the plaintiff's *predecessor-in-interest* acted in getting out of the market. It is a contemporaneous record.

Mr. Cuningham: Predecessor, that is true, in interest.

The Court: What page was that offered on?

Mr. Cuningham: I think I can tell you that. It is in the back of the book here.

The Court: It might be admissible on another ground.

Mr. Cuningham: What is the Potter number?

The Court: 22.

Mr. Cuningham: 22, that is on Page 274. [450]

The Court: Page 274.

Mr. Cuningham: I do not know what part of the testimony you ruled out. I do not think it is, or we would not have put it in. There was no objection to it at the time.

The Court: What about that?

Mr. Kolisch: Well, you reserve your objections.

Mr. Cuningham: No objection was reserved.

Mr. Kolisch: You do not have to, under the rules.

The Court: You did not object, though.

Mr. Kolisch: You do not have to.

Mr. Byron: We do now.

Mr. Kolisch: We can now.

The Court: But you cannot now only on the basis of materiality.

Mr. Cuningham: I should think so, your Honor.

Mr. Kolisch: I think only the questions as to the form of the question. All other objections are reserved.

The Court Let us take a look. The vice of the offer is that there was no showing that this was a record kept in the ordinary course of business. If there had been such an offer, you could get it in under the shop book rule.

Mr. Cuningham: I think there is, sir.

The Court: No, there is not. I just checked it.

Mr. Cuningham: Well, of course, I state now that it was one of the papers, and he identified it. [451]

Mr. Maguire: Well, I do not think counsel would make any question that it was a paper, part of the files as of the date it was performed.

The Court: I am going to let it in on this ground. 32(c) says: "Objections to the competency of a witness or to the competency, relevancy, or

materiality of testimony are not waived by failure to make them before or during the taking of the deposition, unless the ground of the objection is one which might have been obviated or removed if presented at that time."

If they objected to that testimony on the ground that it was not under the shop book rule, then that testimony could have been obviated at the time, and I am going to let it in on that ground. With reference to the two exhibits, 120-A and -B, what is the basis of the objection to them?

Mr. Cuningham: What are those, sir? I am sorry.

The Court: They are the letters that Mr. Potter says that he is the owner of the patent and all the rights, and he is transferring them over to these corporations. Then there is one where he says that he has right of representation as far as all of the trustees are concerned in making deals.

Mr. Cuningham: Well, your Honor, the really basic objection to these is that they are not—the one of September 1, 1950, is not proved, for one thing. There is [452] no proof that this was ever signed—I happen to know that it was not.

Mr. Byron: Oh, well——

The Court: What did Mr. Potter say about that? Let me find the testimony.

Mr. Cuningham: That it has no bearing—that is the main objection—shows how dangerous it is to let things, this sort of thing, in—the main objection, your Honor, is that it is prejudicial and has nothing whatsoever to do with the main issues in

the case, the validity and infringement of the patent. It has, in fact, no relevancy to any serious issue in the case that I know of.

The Court: I was under the impression prior to the time of the trial that there was no question about title. At the commencement of the discussion with reference to this trial Mr. Ramsey pointed out that he never intended to waive title and that he did not put it in issue—he merely did not put it in issue on the segregated issues involving summary. I told him at that time that ordinarily we require such things to be raised, but in view of the fact that there was a great number of out-of-town lawyers who were not acquainted with our particular rules, local rules, that I was making an exception in this case and going to permit him to raise the issue now.

I do not think that I can keep out evidence [453] because it is not relevant to the main issues, so-called infringement or validity, but here is an issue which the defendants claim that they are seriously urging, and, therefore, if there are no technical objections to the admission of the exhibit, I am going to let it in.

Now, you say that this agreement was never signed?

Mr. Cunningham: Yes, I object to its competency.

The Court: What did Potter say about it?

Mr. Byron: He said he wrote it and sent it, and Mr. Burner had several conferences in connection with it.

Mr. Cuningham: I think that is correct, your Honor, and I happen to know it was never signed.

Mr. Byron: Oh, well——

Mr. Cuningham: But that is not testimony; it is not proved.

The Court: The objections are overruled, and it may be admitted; all three of the exhibits are.

(Trust agreement previously marked as Plaintiff's Exhibit 120-A was received in evidence.)

(Letter to Mr. Burner dated November 1, 1950, previously marked as Plaintiff's Exhibit 120-B was received in evidence.)

Mr. Cuningham: Your Honor, this one—and by this [454] one I mean 120-A—the one we have been talking about is 120-B—that, of course, is a signed agreement.

The Court: Are you willing to do this: Instead of making Mr. Cuningham take the stand, are you willing to stipulate that if Mr. Cuningham testified he would testify that he of his own knowledge knows that that agreement was never signed?

Mr. Byron: No.

Mr. Cuningham: Your Honor, I will not say that. I will say that I have seen an original, I believe it is—just this to Burner—I saw the original of this probably three or four months ago, and then I saw it again in October. It had not—the original had not been signed that I saw in Mr. Burner's files, and there were notes on the side indicating objections to this and that. That was in the file. I

think it was after the Potter deposition that I paid particular attention to it.

Mr. Byron: Mr. Potter says about that on Page——

The Court: Well, he admits that, but the only thing is if Mr. Cuningham knows of his own knowledge that it had not been signed, I was wondering whether you would be willing to stipulate that he would so testify; not that it is true; apparently he does not know whether it was signed—a copy, a duplicate original may have been signed. [455]

Mr. Cuningham: All I know is what I saw, your Honor.

The Court: Yes, that is right.

Mr. Cuningham: It is my inference.

The Court: Yes, that is right. I was trying to avoid the necessity of counsel, any counsel in this case, taking the stand. I do not like that in my Court, and when an attorney says that this is the state of the record I think that counsel should stipulate to it.

Mr. Cuningham: Do you know what I would like to offer to do? I will wire Burner and have him send it on here.

The Court: That would not show that another copy, a duplicate original, was not signed. Potter has already testified——

Mr. Byron: Here is what Potter said:

> "Does this letter constitute a general agreement in which Moist Cold Corporation was formed? In general, yes. How does it differ?"

And then he could not point out any difference. Then we made an offer.

Mr. Cuningham: Burner, of course, should know, and the trustees.

The Court: Would you permit Burner, if they got a wire from Burner to the effect——

Mr. Byron: No, I would not take that. [456]

Mr. Ramsey: If I showed you an exhibit taken in the New York case showing signatures on it, would that relieve your mind?

Mr. Cuningham: Surely; I wish you would.

Mr. Byron: No, you cannot do that.

Mr. Ramsey: I know that first was never signed.

The Court: Well, go ahead and see. I do not want anybody to do something that they feel they should not, but, ordinarily in this Court these courtesies are extended to every member of the Bar, and I just want to tell you nobody is going to be required to do it. Let us go ahead.

Mr. Ramsey: We will not observe any courtesies.

The Court: Let us talk about it a little later.

Mr. Cuningham: Your Honor, I have another exhibit marked in the portion you marked out. Just to make the record, I assume the exhibit goes out with the testimony? It is marked 3-HHH for Identification (presenting document to the Court). It is germane, of course, to the testimony you ruled out.

The Court: All right; that goes out, also.

Mr. Cuningham: Now, sir, may I take this first

opportunity I have had to give notice of the reliance on other depositions of the Admiral Company and other portions of them than I did before. It is the exclusion of this testimony that has forced that change in my attitude, and I shall [457] start to read them as soon as possible.

Mr. Byron: Are you going to tell me what portions?

Mr. Cuningham: Do you want to take the time now?

The Court: Are we going to do it today?

Mr. Cuningham: Oh, I do not think so, sir.

The Court: Do it after a while.

(Thereupon, Court and counsel repaired to open Court where the following proceedings were had with the jury sitting:)

The Court: Ladies and gentlemen of the jury, we were late this afternoon again, but I think we have accomplished quite a bit, and, as a result, the testimony that you will hear has been considerably shortened. We are going to recess or adjourn for the day promptly at 4:00 o'clock. It is snowing outside, and there may be some jurors who live some distance from the center of town, and they may want to be able to get home.

We will start now with Page 326, beginning the cross-examination by Mr. Byron. As you know, Mr. Lucas takes the part of Mr. Byron. Mr. Byron, what are you going to do—point out these numbers?

Mr. Byron: Yes; Mr. Lucas is going to read my cross-examination questions to Mr. Potter, and as it is read I am going to point out corresponding parts with respect to the [458] Potter Patent in Suit. By the way, this is the Potter Patent in Suit (indicating). It is not so marked, but it is, and I am going to point corresponding parts in the Anderson Patent. It is not marked "Anderson," but that is one drawing of the Anderson Patent in Suit (indicating), and I am going to show corresponding parts. This Anderson Patent is, oh, ten, twelve, thirteen years earlier than the Potter.

Mr. Ramsey: Not the Anderson Patent in Suit.

Mr. Byron: No, not the Anderson Patent in Suit. It is the Potter Patent in Suit. Anderson is the reference against it.

DEPOSITION OF T. IRVING POTTER

Cross-Examination
(Continued)

"Q. Mr. Potter, in your patent in suit you have or show a Cabinet 10, do you not?

A. Yes, sir.

Q. And the Anderson patent shows a Cabinet 9, does it not?

A. I don't know what the number is, but it shows the cabinet. I don't know whether that would indicate just merely a structure around the machine compartment, but I say that shows a cabinet. Doesn't that answer you?

Mr. Byron: I was trying to simplify it for you by giving numbers.

(Deposition of T. Irving Potter.)

Q. (By Mr. Byron): Now, in the Potter construction there [459] is a freezing compartment, is there not? A. Yes.

Q. That is the intermediate compartment?

A. I don't know what you mean.

Q. It is between the cooling compartment 14 and the lower compartment 11?

A. Yes, there is a compartment between the two."

Mr. Cuningham: May I note on the record, your Honor, that Mr. Byron is pointing both to compartments 13 and 12 when he questioned as to the "freezing compartment."

Mr. Byron: Let us have an understanding on that. As I understand the position of plaintiffs, it is that they have a portion in which trays are set for freezing water, and that is, say, 8 degrees below zero, and the adjacent compartment 13 is 20 degrees above zero but still freezing because it is below 22 degrees. Now, then——

Mr. Cuningham: Objection. I do not think you should testify as to what this is.

Mr. Byron: I am not. I am asking you how we shall consider it. I do not want to make any misrepresentations, and I will not.

Mr. Cuningham: I am not prepared to take a position. I note that you take the position that the two compartments were the same. [460]

(Deposition of T. Irving Potter.)

Mr. Byron: Well, he said "freezing compartment," and those are both freezing compartments, and I thought I should not just show one but both freezing compartments.

The Court: Go ahead. [461]

The Court: All right. Go ahead.

Mr. Lucas: "Q. And there is a freezing compartment 7 in the Anderson patent?

A. They have a freezing compartment there, yes.

Q. And there is a cooling compartment 14 in the Potter refrigerator, I assume from the patent in suit, 14; is that right?

A. A compartment labeled 14, yes.

Q. And that is a cooling compartment, is it?

A. Yes.

Q. That is the lower temperature compartment?

A. No, higher.

Q. Thirty-two degrees and over?

A. Yes.

Q. And then there is a corresponding cooling or refrigerating compartment——

Mr. Cuningham: I have an objection to that 'corresponding.'

Q. (Continued): But there is a cooling or refrigerating compartment 6 in the Anderson patent, am I right?

A. They have a compartment marked 6 in the Anderson.

Q. And that is for cooling food at a temperature above 32 degrees, is it not?

Mr. Cuningham: I make an objection.

(Deposition of T. Irving Potter.)

A. There is no indication of what the temperature is.

Q. The temperature in compartment 7 is below freezing, is [462] it not?

A. There is no indication.

Q. Well, there is a description of it in the specifications.

A. That is why I said I would have to study this.

Q. Now there is a freezing coil 22 in the Potter arrangement, is there not? A. Yes, sir.

Q. And there is a freezing coil?

A. That is in the brine tanks.

Q. And there is a freezing coil 34 in the Anderson patent?

A. From the drawing that could be a freezing coil or not.

Q. Well there are ice trays 37 there, are there not?

A. There seems to be indications of ice trays there.

Q. And then they would be freezing coils, would they not? A. In all probability.

Q. And there is a cooling coil, a refrigerant coil 40 in the upper chamber of Anderson, is there not?"

Mr. Cuningham: Mr. Byron is pointing——

Mr. Byron: Just don't get excited. I will point to the right one.

The Bailiff: "A. There is something marked 40 and the drawing shows a pipe system in the

(Deposition of T. Irving Potter.)

upper compartment. I don't know whether that 40 identifies that, but it shows a pipe system——

Q. And there is a cooling coil 25 in the upper compartment [463] 14 of the Potter arrangement?

A. There is, sir.

Q. And the freezing coil 22 in Potter and the cooling coil 25 in Potter are connected in series are they not? A. Yes.

Q. And the freezing coil 34 in Anderson is connected to the cooling coil 40 in Anderson, and they are connected in series? A. Yes.

Q. And the freezing coil 22 in Potter is connected to the compressor condenser set in compartment 11; is that right?

A. The freezing coil 22 is connected to the compressor equipment.

Q. That is correct?

A. Yes, in the Potter, yes.

Q. And the freezing coil 34 in Anderson is connected to the compressor condenser set in Anderson?

A. Yes.

Q. And in the Potter patent there is an expansion valve 23 between the condenser compressor set and the freezing coil 22; is that correct?

A. There is an expansion valve 23——

Q. Between the freezing coil 22 and the condenser compressor set? A. Yes. [464]

Q. Now in Anderson, there is an expansion valve 33 between the freezing coil 34 and the condenser compressor set in Anderson, is that right?

A. That looks like an expansion valve, and I presume it is.

(Deposition of T. Irving Potter.)

Mr. Byron: It is described as such.

The Witness: All right.

Q. And then in the Potter arrangement, there is connection between the cooling coil 25 and the condenser compressor set, is that right?

A. Yes.

Q. And in Anderson patent, there is a connection between the cooling coil 40 and the condenser compressor set, is that right? A. Yes.

Q. And in the Potter arrangement, there is a thermostat 31 in the cooling compartment, is that correct? A. Yes, sir.

Q. And I call your attention to the Anderson patent specification, page 1, beginning in line 91. Do you find that in the second column?

A. I find line 91, yes.

Q. And I quote now 'suitable automatic controlling mechanism, as exemplified by a thermostat in the refrigerating chamber,'—that refers to a thermostat, does it not in the refrigerating room or rather the refrigerating chamber? [465]

A. They say a thermostat, yes.

Q. In connection with the Potter refrigerator, you used Anderson patent No. 1439051 on the patent plate secured to your Potter refrigerator; is that correct? A. Yes, sir.

Mr. Byron: The cross-examination is closed.

Mr. Cuningham: I have no redirect.

Mr. Byron: The deposition is closed."

The Court: Do you want Mr. Hart for another deposition?

(Deposition of T. Irving Potter.)

Mr. Cuningham, will you announce the name of the deposition you desire?

Mr. Cuningham: May I confer with Mr. Cheatham?

The Court: Yes. Excuse me.

Mr. Cuningham: May it please the Court, I would like to read the deposition of Ferdinand J. Bommer, taken on the 21st day of April, 1955, at Orlando, Florida.

The Court: Is it Bommer?

Mr. Cuningham: Yes, it is B-o-m-m-e-r, and it happens to be misspelled throughout the deposition as B-a-u-m-e-r. I happen to know the name is o-m-m-e-r.

The Court: I think that was corrected in my copy of the deposition. Now, may I have another copy? Are there other copies available of this?

Mr. Cuningham: Your Honor, we only have one.

The Court: How about the defendants, how many do you have? [466]

How many copies do the defendants have, just one?

Mr. Byron: We have another that we will loan to your Honor.

(Whereupon Mr. Hart, the bailiff, took the witness stand to answer the questions being read in the deposition, the part of Mr. Berner in the deposition being taken in the present case by Mr. Cuningham, and the part of Mr. Byron in the deposition being taken in the present case by Mr. Lucas.)

DEPOSITION OF FERDINAND J. BOMMER

"Q. Would you please state your name, age, residence and occupation?

A. Ferdinand J. Bommer; 59; my residence, 111 Rose Arden Drive. I am the owner of Hill's Colonial Hardware.

Q. Now could you give us a brief resume of your business experience right to date?

A. I formerly started with Heintz & Meunschauer Refrigerator Company in Buffalo, New York, where I was employed for some time. Later, during World War I, I was with the Curtis Airplane Company, and later in 1919, or early 1920, I was with the Jewett Refrigerator Company at Buffalo, New York. I was with the Jewett Refrigerator Company until December 1, 1933, when I went with the Potter Refrigerator Company, and I was [467] with the Potter Refrigerator Company until June, 1938. I returned to Jewett Refrigerator Company to do some special test work until August, 1940, when I joined the Sanitary Refrigerator Company, and I was with the Sanitary Refrigerator Company until March 31, 1954.

It might be noted that on December 1, 1952, the name of Sanitary Refrigerator Company was changed to Quietrez, Inc.

Q. All of them are in the refrigerator business?

A. Yes, sir. All of them are in the refrigerator business. My entire experience from 1920 to 1954 was all in the refrigeration industry, directly.

Q. It would be fair to say that you spent most

(Deposition of Ferdinand J. Bommer.)

of your life, or about 34 years, in the refrigeration industry? A. Yes, sir.

Q. Now what sort of work did you do for Heintz & Meunschauer?

A. I worked in the factory, performing various production operations.

Q. And after that, you were with the Jewett Company; after a short interval, with Curtis?

A. Yes.

Q. And what did you do with the Jewett Company?

A. Jewett Refrigerator Company of Buffalo?

I started in learning the mechanics of the Jewett refrigerators. Subsequently became an installation engineer, [468] factory foreman, factory superintendent and chief engineer.

Q. Now how long had the Jewett Company been in the refrigerator business?

A. If my memory serves me correctly, they started in 1871 or 1879.

Q. And what was their reputation in the refrigerator business? That is, the reputation of the Jewett Company.

A. They built the highest class of custom-built refrigerators that were ever made.

Q. And what type of boxes did they build?

A. All types. It would be hard to limit the scope. Their operation was different from a majority of the large companies, as we know refrigerator producers today, because they built both commercial and domestic refrigerators.

(Deposition of Ferdinand J. Bommer.)

Q. And could you tell us the sort of places where you installed the Jewett refrigerators? That is, where you personally had something to do with it?

A. Very well. We put in installations such as all of the Statler Hotels over the country; all of the Biltmore Hotels; the big Cornell Medical Center in New York City; the Columbia Presbyterian Hospital in New York City; the Western Reserve University in Cleveland; Chicago University; a good many of the Union League Clubs all over the country; the Cloud Club in the First National Bank in Chicago; and such homes as Henry Ford's, Edsel Ford's, Charles M. Schwab; the Borden's, the [469] Leaders, Alvin McCauleys; I think that's enough, isn't it?

Q. Now did Jewett install any mechanical refrigerators? A. Some.

Q. And did they manufacture the mechanical refrigerating equipment? A. They did not.

Q. When they had a job to install a mechanically-refrigerated outfit what did they do?

A. In those cases, the mechanical parts were subcontracted. I would like to note that in later years the Jewett Company did manufacture complete electric refrigerators. Cabinets were completely made at the Jewett factory and the mechanical parts were purchased parts which were assembled and installed in these cabinets and sold as a complete unit.

Q. Now about when did you become Chief Engineer for Jewett? Was that about 1927?

(Deposition of Ferdinand J. Bommer.)

A. About 1927.

Q. And it was that position you held when you first became acquainted with the Potter Refrigerator Company? A. It is.

Q. Now could you tell me whether or not you have ever held any social memberships or offices?

A. For a period I represented the Potter Refrigerator Company in the National Electrical Manufacturers Association. Later, after I joined the Sanitary Refrigerator Company, I represented the Sanitary Refrigerator Company in the National Electrical [470] Manufacturers Association, and during my membership in the National Electrical Manufacturers Association I served as Chairman of the Farm and Home Freezer Division on two occasions, and lastly was Chairman of the Household Refrigerator Division of the National Electrical Manufacturers Association, ending my office in 1955.

Q. Now how did you come to leave the Jewett Company as Chief Engineer?

A. After working on the Potter refrigerator it seemed that this was an opportunity that had tremendous possibilities. It seemed that the Potter-type refrigerator would most assuredly revolutionize the refrigeration industry. Being ambitious, I wanted a part in it.

Q. And did Mr. Potter invite you to come over with his company?

A. Mr. Potter did invite me to come with the Potter Refrigerator Company.

(Deposition of Ferdinand J. Bommer.)

Q. And in what capacity?

A. As Chief Engineer.

Q. That was in what year?

A. That was in 1933.

Q. Now prior to that you had done some work in connection with the Potter refrigerator?

A. Yes, sir, I had.

Q. That was while you were with the Jewett Company? [471] A. That is.

Q. And was the Potter Company a customer of the Jewett Company? A. They were.

Q. And that is how you became acquainted with Mr. Potter? A. Yes, sir.

Q. Now just what work did you do for the Potter Refrigerator Company while you were with Jewett?

A. I designed cabinets patterned off from a sample submitted by Mr. Potter into the latest production methods that we knew of at that time.

Q. Is it fair to say that you did the detail engineering on some of the Potter cabinets under Mr. Potter's directions?

A. I had all of the contact with Mr. Potter.

Q. Then by 'Mr. Potter,' you mean Mr. T. Irving Potter? A. T. Irving Potter; yes, sir.

Q. Now what sort of job was it that Jewett undertook for the Potter Corporation?

A. Mr. Potter submitted a sample refrigerator to us and wanted us to make the necessary detail construction changes so that it could be produced

(Deposition of Ferdinand J. Bommer.)

on a production, or let's say, a high volume production basis.

Q. Can you recall approximately what time this was that Mr. Potter submitted to Jewett the sample box?

A. I think I had the time more accurately. I would say it was about 1931. [472]

Q. That was what you testified to previously.

What was the distinguishing characteristic of the refrigerator that Mr. Potter brought to Jewett as a sample?

A. Mr. Potter brought a household refrigerator. It was different in that it contained two compartments instead of one. The compartments were insulated from each other and one compartment contained considerably more insulation around it than the other.

Q. And do you recall what the two compartments were lined with?

A. The two compartments were lined with some sort of Monel metal, or stainless steel.

Q. Are those corrosive-proof?

A. They are.

Q. Now how were the compartments arranged?

A. There were two compartments, one above the other.

Q. And what was the purpose of having the two compartments?

A. The refrigerator was designed so that the upper compartment to provide refrigeration for

(Deposition of Ferdinand J. Bommer.)

foods in a fresh state at normal refrigerating temperatures, and the lower compartment, which was more heavily insulated, was designed for the storage of foods in a frozen state. It also contained the device for freezing ice cubes.

Q. Now about what degrees temperature?

A. The upper compartment for fresh food operated approximately [473] forty to forty-five degrees. Had a variable range.

Q. Now could you tell us the various units that were within the cabinet that Mr. Potter submitted Jewett Company as a sample?

A. You refer to the mechanical parts?

Q. Yes.

A. As I testified before, there is a question in my mind as to whether or not there was a condensing unit in the lower section of the cabinet. A condensing unit had been in the lower part of the cabinet and there was evidence that a machine had been run and connected to the rest of the mechanism which was in the cabinet when submitted. From the machine there was the tube leading into the lower, or frozen, compartment at the end of which was attached an expansion valve. This expansion valve was attached to a cooling unit known as a freezer plate which was the cooling and freezing mechanism in the lower compartment. A tube from the freezer plate then led up to a finned coil in the upper compartment which had a tube connected to it leading back to the unit.

(Deposition of Ferdinand J. Bommer.)

Q. Now could you describe the relative thickness of the insulation above the frozen storage compartment and the ordinary storage compartment or the frozen food compartment?

A. The insulation in the upper, or fresh food compartment, or surrounding the upper or fresh food compartment, was three inches thick; and the insulation surrounding the frozen food [474] compartment was five inches thick.

Q. And the insulation between?

A. The insulation between was two inches thick.

Q. Now was there a thermostat in the box?

A. There was.

Q. Where was that located?

A. The thermostat was located in the upper, or fresh food compartment.

Q. Was there any thermostat in the lower compartment? A. There was none.

Q. Now how were the evaporators connected?

A. With a tube.

Q. And can you give us the circuit of the refrigerant starting with the high side of the pump, and tell us where it went?

A. After the expanded gas was condensed in the compressor it passed through a condenser where the heat was dissipated, and into a receiver. From the receiver it flowed through a tube up to the expansion valve in the frozen storage compartment; through the freezer plate in the frozen storage compartment up through a tube to a finned coil in the

(Deposition of Ferdinand J. Bommer.)

fresh food compartment, and then back through another tube to the compressor.

Q. And from the compressor went to the condenser to complete the circuit?

A. We started with the compressor.

Q. All right. Then it would start over again. Is that right? [475] A. Continuous operation.

Q. Have you ever seen a refrigerator of this design prior to the submission by Mr. Potter to the Jewett Company? A. No.

Q. Had you at that time a good working acquaintance with the various makes of domestic electric refrigerators which were on the market?

A. Yes, sir.

Q. Now did you proceed to build any production models? A. We did.

Q. Where were those built?

A. At the Jewett Refrigerator Company.

Q. Under whose supervision?

A. Under my supervision.

Q. As Chief Engineer of the Potter Refrigerator? A. Yes, sir.

Q. Now I show you a folder which has been previously marked in an earlier litigation as Plaintiff's Exhibit 28 for identification, and ask you first whether you recognize this as a circular put out by Potter Refrigerator Corporation."

Mr. Cuningham: That is identified as Exhibit 3-L, and already in evidence, I believe.

"Q. Do you have the question?

A. I recognize the photographs of the refrigera-

(Deposition of Ferdinand J. Bommer.)

tors as the type we built for the Potter Refrigerator Company. [476]

Q. Now I call your attention to the illustrations in this which are labeled 'Tricold Host,' and 'Tricold Imperial.' Now how do those illustrations compare with the production models which were produced in the Jewett plant under your supervision?

A. They are very similar, if not identical.

Q. Now did the Jewett Company ever manufacture these cabinets in production quantities for the Potter Refrigerator Corporation?

A. No, sir.

Q. Do you know where such cabinets were manufactured for the Potter Refrigeration Corporation?

A. Rex Manufacturing Company, Connersville, Indiana."

Mr. Cuningham: I now offer this in evidence. Skip it.

The Court: What page are you reading?

Mr. Cuningham: Page 13, sir.

"Q. At some later date, did you become directly connected with Potter Refrigeration Company? Did you become connected with the Potter Refrigeration Company in December, '33?

A. I did.

Q. And what title did you assume with the Potter Refrigeration Corporation?

A. Chief Engineer.

Q. What were your duties as Chief Engineer?

A. To handle the design of cabinets under Mr.

(Deposition of Ferdinand J. Bommer.)

Potter's [477] guidance and instruction and also to supervise production of the Potter refrigerators.

Q. Now did you have anything to do with the procurement of refrigerating units for such cabinets? A. I did.

Q. Now I'll show you another circular which has been marked in the earlier trial as Plaintiff's Exhibit 29, and ask you if you can identify this circular of the Potter Refrigerator Company.

A. I will give you the same answer as I did in submission of Exhibit B28."

Mr. Cuningham: That is identified as 3-M already in evidence, your Honor.

I shall substitute, with your Honor's permission, the exhibit number we have given this next one, Exhibit 3-L.

"Q. Exhibit B28. And does that represent the boxes as you knew them? A. It does.

Mr. Berner: I offer that in evidence as B29.

Now with the consent of Mr. Byron, we have about five or six more that I would like to offer as a group to be numbered in sequence.

Mr. Byron: No objection.

(Thereupon the exhibits were received and marked by the reporter.)" [478]

Mr. Cuningham: These, sir, I believe are already in evidence as 3-N, 3-O, 3-P, 3-Q, 3-R, 3-S, 3-T.

The Court: I have a suggestion, Mr. Cuningham. It might be much more intelligible if you would do what Mr. Byron did a few minutes ago, and as they

(Deposition of Ferdinand J. Bommer.)

discuss the exhibit hold it up. You have done it once, these jurors know that exhibit. But you just lift it up and they will be able to recognize it. [479]

Mr. Cuningham: I think if this group could be handed to the jury we could keep on reading and not lose the time.

The Court: Are these the exhibits?

Mr. Cuningham: They should be 3-L to -T series, I believe.

The Court: Ladies and gentlemen of the jury, you have seen these exhibits—or have they?

Mr. Cuningham: I do not think so, sir.

Mr. Cheatham: I do not think so, sir. They were admitted, passed in but not shown to the jury, I believe.

The Court: I am going to take back what I said and permit you to discuss these exhibits at some later time and even during the argument to the jury, and then you could show them to the jury and discuss them at the same time, but, otherwise, if they are just single pictures I think it might be well to call the number of the exhibit and have somebody show it to the jury so they will know what the witness is talking about.

Mr. Maguire: I think so, because I know a little bit more about the case than the jury does, but, 3-L and 3-T, I have not the slightest idea what you are talking about.

The Court: Of course, I do not want to interfere, Mr. Cuningham, with the way you are putting in your case. I am just making this suggestion.

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: My honest preference is to let the [480] jury see them now. I think it would make it quite slow in the argument to hand them in.

The Court: I think you had better talk to Mr. Maguire about that. He is an old hand in this business, and you will find—I will make this suggestion to you, Mr. Cuningham: It is pretty difficult to listen to the testimony and the reading of a deposition if you are looking at a picture, and a complicated one.

Mr. Cuningham: Thank you, your Honor. I think that is right.

DEPOSITION OF FERDINAND J. BOMMER

Direct Examination
(Continued)

"Q. Now each of the circulars that I have just offered show dates, (Plaintiff's Exhibit 3-N shows date of 1934; Plaintiff's Exhibit 3-O shows date of 1935; Plaintiff's Exhibit 3-P shows 1936; 3-Q shows 1937; 3-R shows 1937; 3-S shows 1938 and 3-T shows 1939).

Now, does that represent the years those circulars were issued?

A. These are all Potter circulars and represent the boxes that were produced at the times marked. That is, in 1934 to 1939.

Q. Would you say the circulars are representative of the Potter refrigerators which were offered to the public and the trade in the years marked?

(Deposition of Ferdinand J. Bommer.)

A. Yes, sir. [481]

Q. Now, prior to the time that you first became acquainted with Mr. Potter, what sort of cooling unit was used in the ordinary domestic electric refrigerator?

A. A sort of metal box affair around which was fastened copper tubing.

Q. And in practical operation of such domestic electric refrigerators, what happened on the surface of these cooling units?

A. They collected frost.

Q. Now did the Potter unit collect frost?

A. No, sir.

Q. Why not?

A. Mr. Berner, when you asked if the Potter refrigerator collected frost, are we talking about the entire unit?

Q. No. I am talking about only the upper compartment.

A. Upper compartment unit did not collect frost.

Q. Now, why did it not?

A. It didn't collect frost because it was of a finned coil type which had an enormous fin area in comparison to the amount of cooling surface through which the refrigerant passed.

Q. Prior to the Potter refrigerator had you ever seen a finned coil, such as you have described, used in any domestic electric refrigerator?

A. No, sir. [482]

(Deposition of Ferdinand J. Bommer.)

Q. Now, going back to the conventional type of boxes that existed prior to the Potter development, what was the effect on the contents of the articles stored in the chamber of the domestic electric refrigerator where cooled units with the tubing were located that you have described?

A. Food dried out very fast.

Q. In other words, dehydrated?

A. Dehydrated.

Q. And what about frost?

A. Frost accumulated on the cooling unit.

Q. And where did that frost come from?

A. Mainly from the food in the refrigerator.

Q. Now, could this accumulation of frost on the cooling unit be allowed to continue indefinitely?

A. No.

Q. What was necessary to keep the refrigerating box (that is, the standard box prior to Potter's development) operating according to the then common practice?

A. It was necessary to stop the machine and melt the frost accumulation off from the evaporator which we called a defrosting operation.

Q. And was that done only once or twice a year, or was it frequent?

A. That was a very frequent operation.

Q. What happened to the temperature of the interior of the [483] refrigerator while this defrosting operation was being carried out?

A. The temperature went up.

(Deposition of Ferdinand J. Bommer.)

Q. Did that have any effect upon the preservation of food that was stored in the refrigerator?

A. It did.

Q. What did it do?

A. It had a tendency to increase deterioration.

Q. And did the dehydration contribute to such deterioration in a standard refrigerator?

A. Yes, sir. It wasn't only a matter of dehydration but discoloration.

Q. Well, what happened?

A. Made the food unpalatable, unedible.

Q. And also affected its appearance? I think you said. A. I said it turned the color.

Q. All right. What would happen with a head of lettuce? A. It would shrivel up and wilt.

Q. What about meat?

A. It would turn black and spoil.

Q. Now, did that happen in the Potter refrigerators? A. It did not.

Q. And why not?

A. In the Potter refrigerator there was no withdrawal of moisture from the food. [484]

Q. Now, did frost accumulate on the cooling unit in the upper box of the Potter refrigerator?

A. No, sir.

Q. And why was that, in terms of temperature?

A. Because the coil operated at a temperature above 32 degrees Fahrenheit.

Q. Well, did the unit (that is, the refrigeration box) withdraw any moisture from the articles stored in that section of the Potter refrigerator?

A. Practically none.

(Deposition of Ferdinand J. Bommer.)

Q. Now, was the refrigerant under the same pressure in both cooling units? A. It was.

Q. And the cooling unit in the frozen storage compartment maintained approximately what temperature in that compartment?

A. Approximately zero Fahrenheit.

Q. And the Fahrenheit scale, now, freezing point of water is what? A. Thirty-two degrees.

Q. Now, with the same refrigerant in it and subject to the same pressure, you say that the cooling coil in the air-conditioned compartment of the Potter refrigerator did not frost up. Is that right? A. Yes, sir.

Q. How do you account for that? [485]

A. The amount of refrigerant passing through the two coils was regulated by an expansion valve. This amount of liquid was regulated so that most of the absorption of the heat in the refrigerant was absorbed in the frozen storage compartment, and that the refrigerant passing through the finned coil in the upper compartment was partially heat-laden by the time it got to this finned coil and, therefore, would pick up only the additional heat beyond which it absorbed in the lower compartment.

It should also be noted that the proportion of the number and size of the fins in relation to the amount of tubing in the finned coil assisted in this condition inasmuch as the flow of heat through these fins was great enough to cause a temperature

(Deposition of Ferdinand J. Bommer.)

rise enough to keep the finned coil operating at a temperature over 32 degrees.

Q. Which was a non-frosting condition?

A. It was over 32 degrees.

Q. And when it is above 32 degrees, that would be a non-frosting condition? A. That's right.

Q. Now, prior to your first being acquainted with Mr. Potter, had you ever seen any domestic electric refrigerators on the market which provided a separate compartment for the frozen storage of foods? A. No, sir. [486]

Q. Well, would you just enumerate briefly what those advantages are of the Potter refrigerator over its forerunners?

A. Is this answer to be a comparison of the Potter refrigerator of 1934 versus competition's refrigerators of 1934?

Q. Yes, please.

A. From the inception of self-contained household domestic refrigerators, there was always a problem which required compromises. In the earlier household refrigerators they attempted to cool a food compartment with the same unit in which they made ice cubes. In order to produce a unit that was capable of cooling the entire food compartment it was necessary to run it at a low temperature. As a result of this cold unit in the food compartment (it was run below 32 degrees), it collected frost and it dried out the food.

And the Potter refrigerator, the main problem

(Deposition of Ferdinand J. Bommer.)

of the domestic refrigerators was solved by entirely separating the frozen storage compartment from the fresh food compartment. It resulted in a double gain because fresh foods could be kept in a fresh and edible condition for longer periods of time, and at the same time there was greater range in acquiring frozen storage and freezing facilities even beyond the freezing facilities in the one-compartment refrigerators produced. [487]

Q. Was it these advantages which led you to give up your position as Chief Engineer with the established firm like Jewett Refrigeration Company and go with a relatively new and young company like the Potter Refrigeration Company?

A. Most certainly.

Q. What was Jewett s standing in the industry?

A. I think they had the reputation for being the highest quality builders in the industry.

Q. And whom did they do building for? For what type companies? Can you name some of them? A. In addition to the companies?

Q. You have already named. I am talking about producers of refrigerators.

A. Refrigerators?

Q. Yes.

A. We produced refrigerators for such people as Frigidaire, General Electric, Westinghouse, Kelvinator, Wayne, Norge, Welsbach, and a long list.

Q. Now, were the advantages you described actually realized by users of the Potter two-compartment refrigerator? A. Yes, sir.

(Deposition of Ferdinand J. Bommer.)

Q. Can you tell us whether the Potter Refrigeration Corporation, in selling these two-compartment refrigerators, made any guarantee or promises of any savings to the purchasers which could be achieved in the home from Potter [488] refrigerators? A. We did.

Q. Will you describe the plan?

A. We made a guarantee that a person using a Potter refrigerator to the best advantage would save $1.00 out of every $5.00 which they were spending for food.

Q. Now, did Potter Refrigeration Corporation ever have to take back any refrigerators under that guarantee?

A. They might have taken back one or two.

Q. Now, after you came with Potter I think you said—who manufactured the refrigerator cabinets for Potter?

A. Rex Manufacturing Company of Connersville, Indiana.

Q. And did you become acquainted with that source of supply as Chief Engineer?

A. I handled the contact with Potter Refrigerator Company.

Q. And did Rex manufacture cabinets for any other manufacturers?

A. They did. For Crosley, Apex, Stewart-Warner.

Q. And who were the chief executives of the Rex Manufacturing Company at that time?

(Deposition of Ferdinand J. Bommer.)

A. I think we should refer to my former deposition. Mr. C. C. Hull was president; Mr. M. R. Hull was production manager; Mr. Edgar Myer was sales manager; and I believe Mr. Winter Hull was chief engineer. If I am not correct about those, it should be corrected. [489]

Q. Now, do you know whether any of the Hulls had completed Potter refrigerators in their own homes? A. Yes, sir.

Q. Who?

A. I know definitely H. Winter Hull had a Potter refrigerator in his home.

Q. He was the chief engineer?

A. Yes, sir. I think most of the members of the family in Rex had them. But I know definitely because I was in Mr. Hull's home.

Q. Now, did the Hulls discuss the Potter-type refrigerator with any other company that you know of? A. They did.

Q. Who?

A. Stewart-Warner Corporation."

Mr. Cuningham: That is out, isn't it?

(Discussion off the record.)

"Q. Now, incidentally, do you have an independent recollection as to Mr. Charles D'Olive? You ever met him?"

Mr. Byron: Wait a minute. Now, your Honor,

(Deposition of Ferdinand J. Bommer.)

I think it was yesterday or the day before yesterday I brought a motion to strike all this, and I have a definite notation here. [490]

The Court: I have not my notes here. I think this goes now up to Page about 51.

Mr. Cuningham: Oh, no, sir.

Mr. Byron: Not that far.

Mr. Cuningham: That is the Potter deposition: not this one.

The Court: What were the pages, Mr. Byron?

Mr. Byron: Page 26, your Honor.

The Court: To what page?

Mr. Byron: And about six lines down on Page 27.

Mr. Cuningham: I have no such notation.

Mr. Byron: And also Page 25 is stricken after that answer, third line on Page 25.

The Court: That is right.

Mr. Byron: Beginning with the fourth line on Page 25, through Page 26 and through the first seven lines of Page 27, I made a motion to strike, and the motion was granted.

The Court: You mean from 26 to 27?

Mr. Byron: I mean from 25, beginning the fourth line of Page 25. That was on a separate motion just made yesterday, or the day before.

The Court: All of 25 except the first three lines and the first five lines on Page 26 are out.

Mr. Byron: Everything on 26 is out.

Mr. Cuningham: Everything? [491]

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: Yes.

Mr. Cuningham: That is not my note, your Honor, and I was present.

Mr. Byron: I would suggest that you look at the notes.

The Court: What time was that? Was that in the morning or afternoon?

Mr. Byron: I do not know. It is just a couple of days ago. There they are dealing directly with certain personnel that is not involved here.

Mr. Cuningham: I would like to know what the grounds are. It is very competent testimony, very pertinent, very important.

The Court: Where is it, down to what point?

Mr. Byron: Down to the sixth or seventh line on Page 27. There they are talking about the relationship of Mr. Hull, who was president of the Rex Company, and Mr. D'Olive connected with some other company. They have nothing to do with these defendants here.

The Court: I am going to allow the motion to strike.

Mr. Cuningham: Where do I start?

Mr. Byron: On Page 27, I think.

The Court: That is right.

Mr. Cuningham: Page 27:

"Q. Now the term 'dry cold' has been mentioned. What's meant by that? [492]

A. I think it meant just what it says, that the air condition in the conventional one-compartment

(Deposition of Ferdinand J. Bommer.)

refrigerato, was dry. I think the word was first coined by Frigidaire.

Q. And the dryness of the cold was produced by what?

A. The frost collecting on the evaporator which was taken out of the food.

Q. And was it true of other refrigerators of that time, that the cooling coil in the food-preservation chamber accumulated frost and required periodic defrosting? A. It was.

Q. In other words, that was not only true of the Stewart-Warner, but of all types then being sold to domestic users commercially at that time?

A. That's correct.

Q. When you say they came up——"

Mr. Byron: Wait a minute.

Mr. Cuningham: Skipping what we agreed to take out——

(Discussion off the record.)

Mr. Cuningham: My difficulty is, your Honor, I do not have Page 28.

Mr. Byron: Oh, yes, you do. You will find it further back. You had some duplications.

Mr. Cuningham: Would you mind lending me your copy. I will read it. [493]

Mr. Byron: Just go back a little further. You found it once before.

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: No, I remember I did not find it.

The Court: Give him Page 28.

"Q. What sort of efforts have been made with respect to minimizing the nuisance of defrosting prior to the Potter development?

A: A pan had been included in refrigerators known as a dehydrator pan which was a porcelain or glass-covered dish placed usually in the lower part of the refrigerator.

Q. Well, was that for defrosting, or was that for dehydration?

A. No. That was to limit the circulation of the air around the food placed in the pan, so it would not reach the evaporator where it would depart with its moisture.

Q. And was that hydrator pan considered an important advance in the art at that time? About when was the hydrator pan developed, or do you know? A. Not offhand.

Q. But was it considered an advance over the earlier art at that time?

A. I say it was considered a necessity.

Q. An advance over the prior time when it didn't have the hydrator pan? [494]

A. That's because it would keep a head of lettuce a few days longer.

Q. Well, was that the solution?

A. I say it was the best solution that they came up with at that time.

(Deposition of Ferdinand J. Bommer.)

Q. That's prior to the Potter?

A. That's right.

Q. And when you say, 'they came up with,' whom do you refer to?

A. I refer to the competition, all other manufacturers.

Q. Well, will you give us the names of some of those?

A. Frigidaire, Kelvinator, General Electric.

Q. Now, referring to the defrosting aspect, can you tell us what the situation was with respect to hat prior to the Potter developments? Or standard type refrigerators?

A. Are you talking about the necessity for defrosting?

Q. Yes.

A. The necessity for defrosting was frequent, and varied with the use of the refrigerator in the individual home. The more they used it the more they put in it, the oftener they had to defrost.

Q. Now, how did they accomplish the defrosting?

A. In those days they accomplished it by shutting the machine off for a period of time until the temperature of the evaporator rose to a point above the freezing point of [495] water so that the water melted off and dripped into a container.

Q. Now, prior to the Potter development were all domestic refrigerators subjected to this necessity for periodical defrosting? A. They were.

(Deposition of Ferdinand J. Bommer.)

Q. And could you describe the effect on food stored in the refrigerator of the defrosting operation? A. During the defrosting operation?

Q. Yes.

A. During the defrosting operation the food in the refrigerator naturally warmed up in relation to the warmer air that circulated in the refrigerator.

Q. And did that result in any deterioration?

A. It resulted in deterioration.

Q. Do you recall whether or not the hydrator pan was featured by any large manufacturer of domestic electric refrigerators?

A. Frigidaire featured the hydrator pan.

Q. About when was that?

A. I would say somewhere around the year 1930.

Q. Now, can you give us some idea of the size and standing of the manufacturer of Frigidaire, domestic electric refrigerators in the industry in the early thirties?" **[496]**

Mr. Byron: May it please the Court, I cannot see that this is pertinent or material.

The Court: How much of this is there?

Mr. Cuningham: About three more lines, four more questions.

The Court: Very well; go ahead. It is easier to let it in.

"A. They were the largest producer of electric refrigerators, subsidiary of General Motors Corporation.

(Deposition of Ferdinand J. Bommer.)

Q. Well, do you know whether Frigidaire maintained a research and development department?

A. Yes, sir.

Q. And have you any ideas as to the size of the department?

A. Probably about two hundred. It was a large department.

Q. That was a large department in the early thirties?"

Mr. Byron: Now we have gone past seven lines. This is strictly immaterial, not pertinent at all, and I object.

The Court: Frigidaire is not being sued here.

Mr. Cuningham: They are not being complained of here either, sir.

Mr. Maguire: I think this goes, your Honor, to the question of the state of the art in the industry and some efforts as to the attempts to overcome a problem. [497]

The Court: Yes, that may be true, but, Mr. Maguire, do you see any relevance between Frigidaire's research department and whether it is a branch of General Motors or Crosley Corporation?

Mr. Maguire: No.

The Court: To determine what the state of the art is?

Mr. Maguire: It is a mere identification of what it was, but the fact that they are large organizations which may have occupied a major portion of

(Deposition of Ferdinand J. Bommer.)

the market, a large portion of the market, and the status of their development.

The Court: We have got a lot of this already.

Mr. Cuningham: May I speak as to that?

The Court: I am allowing it in, overruling the objection. Go ahead.

"Q. Now what sort of domestic electric refrigerator was the Frigidaire at and prior to the time you first became acquainted with Mr. Potter?

A. It was a standard one-compartment electric refrigerator with a single cooling unit in the upper corner of the box.

Q. And it had a machine at the bottom of the cabinet? A. Machine at the bottom.

Q. And did that refrigerator—how did that refrigerator affect moisture in the food stored in it? [498] A. Dried it out.

Q. Now, did Frigidaire, any refrigerators they produced for domestic or home use, have any provision for the frozen storage of food at that time in the same box? A. No.

Q. Well, was there any provision for making ice cubes?

A. We might have to include in the previous answer that there was provision for making of ice cubes and that the ice cube trays could be used for making ice cream. I did not mean to include the making of a small pan of ice cream as a space designed for frozen storage of food.

(Deposition of Ferdinand J. Bommer.)

Q. Now, these pans for making ice cubes or for freezing ice cream, where were they located in the Frigidaire or standard type refrigerator?

A. They were set in sleeves in the cooling unit.

Q. Now, if anybody wanted to store food in the frozen storage in a standard refrigerator, what would they do?

A. Remove an ice tray, or the ice trays.

Q. And how much food could be stored there?

A. Practically none.

Q. And while that occurred, could they, at the same time, make ice cubes? A. No.

Q. Now, what would be the effect of defrosting on any food which had been put in an ice tray with a desire to keep [499] it in frozen storage?

A. That would melt, or thaw.

Q. You mean after it was defrosted?

A. During the defrosting cycle it would melt or thaw.

Q. Well, if you want to preserve food in a frozen storage what do you have to do? Do you do it continuously?

A. You have to maintain it in a frozen condition."

The Court: That is all for a while. Ladies and gentlemen, we are going to take a short recess.

(Thereupon, the jury retired for the afternoon recess.) [500]

(Deposition of Ferdinand J. Bommer.)

The Court: Mr. Byron, I want to say now that the jury has left, that I agree with a great deal of what you said, and as I am listening to this deposition I am more and more impressed with the fact that this man is merely explaining what happens to food that is put into a deep freeze or into a freezing unit, and when I noticed Mr. Maguire's statement that they are not claiming any patentability on a freezing unit. But I have come to the conclusion that it is easier to let this evidence in than to continually rule on it and have any argument. But I am sorry that you didn't bring it to my attention a long time ago, where I could have had an opportunity to check it. But I assumed that there wasn't any real objection to the testimony unless you had brought it to my attention earlier.

What I had hoped was that you could agree among yourselves as to evidence which was clearly inadmissible and on the other portions of the deposition in which you didn't agree that you would have called my attention to it prior to the time that the depositions were read, so there wouldn't be this constant interruption.

Now, if you didn't understand that, or if I am in error, and you in the future want to do that I suggest that tonight or tomorrow morning you call my attention to the portions which you regard as objectionable in depositions yet to be read. [501]

Now, unless there is some serious question involved in the Bommer deposition, I am going to permit Mr. Cuningham to read it without interruption.

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: All right. That's perfectly agreeable. I just feel that, as I think your Honor has observed, the patent lawyers generally are not very technical on objections. They want the facts to get before the Court. But I have been reminded in this proceedings that patent lawyers should act as general lawyers in this regard, and so I have been trying to do that within limits, and I think I know what the limits are now, and I will observe them.

The Court: Recess for a few minutes.

(Recess.)

Mr. Cunningham: "Q. Well, as you will observe in the Potter refrigerator, what provision did it make for the preservation of food in a frozen storage condition? A. It kept it.

Q. For how long?

A. Long periods of time.

Q. Well, what do you mean 'long periods of time'?

A. I used the Potter refrigerator in my own home and had roast beef in it as long as nine months before it was used.

Q. How many years did you use a Potter refrigerator in your own home?

A. From 1933 to 1948. [502]

Q. And what kind of service did it give you?

A. Good. Very excellent service. The refrigerator is still in use.

Q. Now what sort of foods according to your personal experience, have you kept in frozen storage

(Deposition of Ferdinand J. Bommer.)

in your automatic refrigerator other than the roast beef?

A. Roast beef, fish, poultry, vegetables, fruit, most every kind of food that's possible to freeze and then use.

Q. And in what quantities have you stored meat in your frozen storage compartment of your Potter type of refrigerator?

A. Up to 70 to 75 pounds."

Mr. Byron: Now you jump over to about page 53.

The Court: 53?

Mr. Cuningham: My notes agree, I think.

Mr. Byron: 55.

Mr. Cuningham: No, sir; 48.

Mr. Byron: Well, now, let's see—54.

The Court: Well, give it to me, Mr. Hart, and let me take a look at it.

(Whereupon the bailiff handed the deposition to the Court.)

The Court: I thought it was 54.

Mr. Byron: 54 is correct, your Honor, on the motion to strike.

Mr. Cuningham: Your Honor, mine begin on 48. [503]

The Court: Wait a minute.

Mr. Cuningham: There are gaps in the other pages.

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: That was on a special motion to strike the other day.

The Court: What about 48? What about Sanitary? Did I pass on that?

Mr. Byron: I have my pages marked "Stricken by order, 48, 49, 50," and up through the middle of page 53. The other had been stricken.

Mr. Cuningham: I have no such indication at all on 48. I do have an indication at the bottom of 49 and on through the middle of page 50 where we start again, according to my notes.

The Court: I will tell you the reason you haven't. This is marked the same way because these were the portions that you and Mr. Byron agreed to and among yourselves, and then I struck the rest of it and that's why you have got "by order of the Court."

Mr. Byron: Yes.

Mr. Cuningham: Well, sir, I have the same marking. I use ink to indicate "to 47" from wherever we started. I agreed with that, but I didn't understand that 48 was stricken, and I don't think it should be, sir. It's about the Sanitary Company and their licensees.

The Court: Well, we are not going to finish this thing [504] today so start in. We will reserve this. I will take a look at my notes and we will take a look at the ruling of the Court.

Mr. Cuningham: Yes, sir.

The Court: We will leave it go.

Mr. Cuningham: Then can I go to the middle of 54?

(Deposition of Ferdinand J. Bommer.)

The Court: Yes; to the top.

Mr. Cuningham: Top of page 54.

The Court: And the bottom portion is stricken.

Mr. Byron: That's out?

The Court: 55, was a lot of that stricken?

Mr. Cuningham: All right.

Mr. Maguire: I am going to suggest to the Court for the purpose of the record, I doubt whether a motion to strike is a proper procedure, and I think where counsel has made motions to strike he objects to both the questions and the answers. I think that would be more satisfactory.

The Court: That's right, Mr. Maguire. We are not too precise there, but all of us knew what we were talking about. 54.

Mr. Cuningham: "Q. Now, when you left the Potter Refrigerator Company, did you receive anything from them?

Mr. Byron: Objected to as immaterial, irrelevant.

A. I did.

Q. What was that?

A. I received a certificate for two hundred shares in the [505] Refrigerator Patents Corporation.

Q. And do you still own those shares?

A. I still own them."

Mr. Cuningham: Then I go to the middle of——

The Court: No. I think there is another question there on 54 and the answer is on 55.

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: Again my notes—I will be glad to read any question. I don't see any myself. It seems to be just a continuation of the answer, your Honor.

The Court: "Now can you give us the names"——

Mr. Cuningham: "Q. Now can you give us the names of any dealers who handled the Potter refrigerator while you were with them, so far as you can remember now?"

The Court: Turn over to the next page. That question was stricken by mistake, but that is a proper question and you may have that answered on page 55.

The Bailiff: "A. Schwinder Company of Utica, New York; Harper Kelly Company, Tacoma, Washington; Freezmast Company, of Seattle, Washington; Vogt Electric Company, Sacramento; Darmstetter, Lancaster, Pennsylvania; Wittig, of Reading, Pennsylvania; A. R. Weber & Company, Buffalo, New York; Orsenblatt & Hunt, Charleston, West Virginia; Fedderman Company, of Toledo; Windler Motor Sales, in Milwaukee. That should be enough."

Mr. Cuningham: Now, to the bottom of 56. [506]

"Q. Now, did the Potter boxes, as you first knew them—how many thermostats did they have in them? A. One.

Q. And would you describe whether that continued throughout your familiarity with the Potter-type refrigerator?

(Deposition of Ferdinand J. Bommer.)

A. The Potter two-compartment boxes originally had one thermostat in them located in the upper, or fresh foods, compartment, which actuated the —well, let's say it was the only actuating mechanism as far as the starting and stopping the refrigerating mechanism. We began to sell boxes in some places where they were subject to be put in cold rooms in the wintertime, we ran into an occasional condition where the surrounding temperature became low enough that it would not acuate the thermostat in the fresh food compartment and at the same time run the machine enough to keep a frozen condition in the frozen storage compartment. To eliminate that difficulty, we added a second thermostat in the frozen storage compartment which merely actuated the operation of the machine enough to maintain a frozen storage condition regardless of the surrounding room temperature.

Q. Well, prior to your installing your second thermostat, could you say what percentage of cases you had this difficulty in?

A. They were very few. Only in cases where the refrigerator was subject to a surrounding room temperature of less than, [507] let's say, fifty-five degrees or lower.

Q. What was the additional cost of installing a second thermostat? A. Slight.

Q. How would that compare with the cost of service calls?

A. Probably be less than service calls.

(Deposition of Ferdinand J. Bommer.)

Q. Now, Mr. Bommer, do you recall the advertisement of the Potter Refrigerator Company which appears in the Electric Refrigeration News of February 24, 1932? A. Yes, sir.

Q. Is this it (exhibiting the paper to the witness).

I show you a photostat of it.

A. Taking for granted that's complete, that's the advertisement. If I am not mistaken, it was twenty-two pages or twenty pages long.

Q. Would you look through it and see if that——

A. Yes, sir."

The Court: Mr. Clerk, will you get those documents from Mr. Cuningham?

(Whereupon, the clerk handed the documents to the Judge.)

The Court: Is this the 20-page ad?

Mr. Cuningham: Yes.

The Court: What number is it?

Mr. Cuningham: Identified as Plaintiff's 3-U, and it [508] has not been received in evidence, and I offer it.

Mr. Cheatham: I beg your pardon. Another copy has been received in connection with another deposition, and this was a duplication.

The Court: Have you got another copy?

Mr. Cheatham: There is one in already.

Mr. Cuningham: Mr. Cheatham says it is, and he knows more about it than I do.

The Court: What number is it?

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: 3-U. I hope there is no mistake on that, because I want to get it in.

Mr. Byron: We wouldn't deprive you of that.

Mr. Cuningham: May I offer it subject to correction if errors appear?

The Court: Yes. Go ahead.

(The Court displayed the advertisement to the jury.)

Mr. Cuningham: "Q. Is this it (exhibiting the paper to the witness)?"

Mr. Cuningham: Am I right, on the top of page 58?

The Bailiff: You are right, on the top of page 58, but you still have another question yet.

The Court: Go ahead.

Mr. Cuningham: "I show you a photostat of it.

A. Taking for granted that's complete, that's the advertisement. If I am not mistaken, it was twenty-two pages or twenty [508] pages long.

Q. Would you look through it and see if that——

A. Yes, sir.

Q. Mr. Bommer, are you here pursuant to a subponea served on you? A. Yes, sir.

Q. Did you receive a fee of $4.00 in connection with your testimony? A. Yes, sir.

Q. Did you receive any other consideration?

A. No, sir.

Mr. Berner: That's all.

(Deposition of Ferdinand J. Bommer.)

Cross-Examination

By Mr. Byron:

"Q. Now, what was the name of that"——

The Court: One minute. Let them look at the rest of these advertisements for a minute. It is 20 pages here and it's just pictures of and descriptions of the Tri-Cold refrigerator which, I understand, is the same as the Potter. That was the name that was used for the Potter refrigerator?

Mr. Cuningham: Well, your Honor, that is an advertising, as I recall it, of the complete line, both the conventional and the moist cold type. There are only about two pages or three pages illustrating the inventions of the patent in suit. [510]

Mr. Byron: Well, then, why shouldn't we just admit those two or three instead of encumbering the record?

Mr. Cuningham: I think we ought to have the complete line, sir.

The Court: Is Chilled-Air the same as Potter?

Mr. Cuningham: May I look at it, sir?

The Court: Yes. It looks like it.

Mr. Cuningham: I think they are all Potter refrigerators but some of them are—do not have the——

Mr. Byron: Do I understand that—so I may understand the situation, Mr. Cuningham, that Potter was selling a refrigerator which was—you say embodied the invention, and then he was selling a refrigerator which did not have the benefit of moist cold, is that correct?

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: I believe that is correct.

Mr. Byron: Selling both types?

Mr. Cuningham: He had both types and several sizes of both types, and I believe that this is Tri-Cold line and the Chilled-Air is the conventional dry cold type.

The Court: Well, sometime during the course of the trial you will have an opportunity to see them all.

I am trying to let the jury have the benefit of all the testimony there is in a way that is understandable, and that's why I am doing this.

Mr. Maguire: May I suggest this: The jury is going to [511] have a good deal of work to do in this case anyway, and that is a long exhibit. I wonder if it would not be better to segregate from it and put in only that which refers to the refrigerators and involves——

The Court: I think that's an excellent idea.

Mr. Byron: Now, I have a further thought on that, that Mr. Potter was not only advertising about three pages, as I understand it, of so-called moist cold, two-compartment refrigerators, but he was advertising in about 18 pages a refrigerator of the old type that did not have moist cold, making and selling those. So I think it may be just as well to let the whole thing in.

Mr. Maguire: All right. Then go ahead.

Mr. Cuningham: I think I am responsible for Mr. Byron's misapprehension. I think that most of the ads are of the Tri-Cold, as I recall it.

(Deposition of Ferdinand J. Bommer.)

The Court: Well, I think it's about half and half. Well, don't make up your minds now. I think I like Mr. Maguire's suggestion. Go ahead.

Mr. Lucas: "Q. Now what was the name of that Potter Company from whom you received 200 shares of stock?

A. Refrigeration Patents Corporation.

Q. And you still have them? A. Yes, sir.

Q. And the company is active? [512]

A. I couldn't say as to that, sir. As far as I know, it's active. I still have the stock certificate.

Q. And what relation is that to the present plaintiff in this case?

A. That's Moist-cold Refrigeration Company, Inc.? I do not know.

Q. Does the Refrigeration Patents Corporation, Potter's former company, own any stock, or have any equities in the plaintiff in this case?

A. I do not know.

Q. Do you regard that stock as dead or active?

A. No, sir. I regard it as active or I would have destroyed it.

Q. You were very active with the Potter Company in 1932, were you not?

A. No, sir. I joined the Potter Company in December, 1933.

Q. I see. But you were doing work for Potter at the Jewett Company at that time?

A. Approximately that time. Yes, sir.

Q. How do you say it happened that you know about this advertising of Plaintiff's"

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: 3-LL.

Mr. Maguire: No. 3-U.

Mr Lucas: ——"that twenty-two page advertising?

A. Sir, there isn't a man in the refrigerator industry that doesn't know about the Potter twenty-page ad in that particular [513] issue of Refrigeration News.

Q. Now then, could you give me the name of the advertising agent that was responsible for doing that work?

A. To the best of my knowledge, a company called Langshaft-Bonning, and it was Bonning who later came with the Potter Company.

Q. And where are they located?

A. Buffalo, New York.

Q. Still there?

A. Yes, sir. It's under Langshaft, Inc., or something, because Mr. Bonning left the firm.

Q. Now you have spoken something about the competitors of, I'll say, the Potter Company. He changed the name of his company several times but I am referring to the period when you were with the company from 1933 to 1939. A. Yes, sir.

Q. For some reason you have laid an awful lot of stress on Stewart-Warner. Well, now, will you please give the names of the other so-called competitors of Potter?

A. To the best of my knowledge, there was no other company competing with Potter Refrigerator Company with the two-compartment refrigerator

(Deposition of Ferdinand J. Bommer.)

prior to Stewart-Warner's general offering of that type of a refrigerator. [514]

Q. And what year was that Stewart-Warner offered?

A. If my memory serves me correctly, it was during 1938 and 1939.

Q. Now then, that is the only one that you know of now, Stewart-Warner is making a two-temperature box?

Mr. Berner: In that period.

A. In that period.

Mr. Byron: That's what I say.

A. Up to that time.

Q. Now then, what companies, after that time, manufactured the two-temperature boxes?

Mr. Berner: You mean after 1939?

Mr. Byron: That's the only time we are talking about.

A. After 1939, practically every company in the industry.

Q. All right. Name those if you will.

A. Frigidaire, General Electric, Philco, Westinghouse, Kelvinator, Crosley, International Harvester Company, Deep-freeze, many more private brand boxes.

Q. Now you have referred to the Sanitary Company with which you were employed for a while and then the Continental something, with whom you were employed thereafter. And you stated that the Sanitary Company had a license under the Potter patent? A. Yes, sir.

(Deposition of Ferdinand J. Bommer.)

Q. How long did that license exist? [515]

A. Three or four years.

Q. It terminated when?

A. I would say that you would have to refer to somebody at the Sanitary Refrigerator Company for that answer.

Q. Well, you indicated you knew.

A. I would say that approximately during 1940.

Q. One year, they had a license?

A. No. It was longer than a year.

Q. How much longer?

A. That I can't say. I would have to get the records to find out.

Q. Now, you don't know whether or not Continental had a license, do you?

A. Yes, sir. Through Sanitary. The Sanitary Refrigerator Company was primarily a manufacturer of ice refrigerators, old-fashioned iceboxes. In order to facilitate their handling of mechanical refrigerators, at some time prior to my going, or becoming associated with, them they incorporated a totally-owned subsidiary of the Sanitary Refrigerator Company known as the Continental Corporation in order to keep bookkeeping and dealerships and other items separated from this ice refrigerator operation. When the license was taken out with Potter, it was taken out by, and in the name of, Sanitary Refrigerator Company. All of the refrigerators that were produced and handled were manufactured and sold under [516] their Continental brand name again as another division.

(Deposition of Ferdinand J. Bommer.)

Q. It was, in effect, the same company so far as the license was concerned?

A. That's right. There was some kind of record in the minutes of the Potter Refrigerator Company —or I mean of the Sanitary Refrigerator Company —and the Continental Refrigerator Company, where Sanitary assigned their license, or the use of their license. You know more about that than I would.

Q. And did Sanitary put in the entire operating refrigerator cabinets for the company that sold them? A. That's right.

Q. And did Sanitary put in the entire operating mechanism in the cabinets, also?

A. Yes, sir.

Q. One was a manufacturing organization and the other one was a sales organization?

A. That is correct.

Q. And Sanitary had good facilities for manufacturing cabinets? A. Yes, sir.

Q. And how long did they continue to manufacture refrigerators of this type that you call the 'Potter type'?

A. Until 1940, when they also ran up against a Stewart-Warner condition of selling and dumping refrigerators at [517] prices that they could not afford to compete with.

Q. Well, now, there were other competitors at that time, too, were there not? You have given a long list of competitors.

A. Those competitors were not making a two-

(Deposition of Ferdinand J. Bommer.)

compartment refrigerator at that time. My answer, before, was what is being made, now.

Q. Yes, but when did all of these other companies start to make the two-temperature refrigerators?

A. Practically all of them started after the end of World War II when materials were regranted at the end of World War II.

Q. And, so far as you know, none of these other companies manufactured the two-temperature refrigerator before World War II. Is that correct?

A. There were refrigerators made of the Potter type as competitors by the Apex Company who also had a Potter license.

Q. And any other companies?

A. No, not to my knowledge.

Q. Now, referring to this Stewart-Warner test of the Potter refrigerators, you have stated that meat or provisions were placed in the refrigerator, and I assume the refrigerator was in operation.

A. Yes, sir. That's true. [518]

Q. And then it was closed and operated, we'll say, for 24 hours, I believe is the period you mentioned? One of the periods? A. That's right.

Q. And there was a loss of weight in that food from the time it was placed in the refrigerator until the time it was taken out? That's correct, isn't it?

A. That's correct.

Q. I thought it was your testimony that there would be no dehydration with the use when a Potter-type refrigerator was used.

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Mr. Berner: Pardon me. Are you referring to under the test conditions, Mr. Byron, or are you referring to as used normally?

Mr. Byron: I'm just talking about the test.

Mr. Berner: All right. You didn't say that. I want to object to it because the witness didn't say that that was so under the test conditions specified. H. was referring to room conditions.

Q. Is it your position that with the use of this so-called Potter refrigerator there was no dehydration with respect to the food or the air in the main storage compartment? The warmer compartment?

A. The claim that was made by Potter was that the dehydration, or any dehydration, was reduced to a negligible amount; [519] that it would keep food for much longer periods of time than a conventional refrigerator. It would be foolish for any engineer to go on record as saying there was no dehydration.

Q. Do you know how much dehydration there was in the Stewart-Warner tests?

A. You mean in that made of the Potter refrigerator?

Q. Yes.

A. I do not have those records; no, sir.

Q. Did you ever know? They must have told you.

A. I think they showed us test figures at the time. It should be a matter of Stewart-Warner records, after those tests were made, when they made them.

Q. Now, do you have any idea how much dehydration there was in that upper warmer com-

(Deposition of Ferdinand J. Bommer.)

partment of the Potter refrigerator in the Stewart-Warner test? A. No, sir.

Q. You did know at one time?

A. Yes, sir.

Q. Was it considerable?

A. I would say that it wasn't.

Q. Was not?

A. It was not considerable.

Q. The fact is you don't know at the present time?

A. I think that's an unfair position. I don't want to [520] be—I'm saying just this: That when it comes down to a technical engineering measurement of moisture loss, are we going to figure it on the basis of ounces or are we going to figure it on the basis of the finest measuring that you can make? I would say that I don't want to be on record as saying I don't know. I say that it was not excessive dehydration.

Q. You refer to the Rex Manufacturing Company as having made the Stewart-Warner cabinets at the time that company was manufacturing cabinets for Potter. At that time, that same period, Rex Manufacturing Company was also manufacturing cabinets for several other refrigerator companies, were they not? A. Yes, sir.

Q. Will you name those, please?

A. Crosley and Apex.

Q. There were others beside that?

A. Probably more. At one time they made the

(Deposition of Ferdinand J. Bommer.)

Mayflower cabinet. There were other makes made in the factory.

Q. Well, you know of others, don't you? You were down there. A. Yes, sir.

Q. Well, name the others.

A. I don't know as I can remember all the cabinets they made.

Q. Frigidaire?

A. No, sir. They made some for Williams Oilamatic, or Iceamatic. [521]

Q. Can you think of any others?

A. No, sir. Not offhand.

Q. But, at the same time, they were manufacturing refrigerator cabinets for many different companies, were they not? A. Yes, sir.

Q. How many would you say, at the time? How many refrigerator companies was Rex manufacturing cabinets for at the time that Rex was manufacturing cabinets for Potter?

A. I don't think Rex ever had more than two contracts in any one year."

The Court: I do not see the relevancy of all this Rex business, and I think much of this testimony is in answer to cross-examination—in answer to or cross-examination of portions that were deleted.

Mr. Cuningham: Your Honor, I think this is perfectly proper cross. We did not object to it at the time.

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: I have no objection to it being in or out.

The Court: I am objecting to it on the ground of how much are we going to read of things like this. There are important issues that I think should come before this jury.

Mr. Byron: I think this page is about the last of that. I may be wrong, but I think that is true.

The Court: I see on Page 78 we are talking about Apex [522] again and Sanitary.

It is five minutes to 4:00, and I think we are going to save a lot of time by adjourning at this time so that the jurors can get home, those who have to get home within a reasonable time.

(Discussion off the record.)

The Court: Ladies and gentlemen of the jury, you are now excused until 9:30 tomorrow morning.

(Thereupon, the jury retired for the evening, and the following proceedings were had without the presence of the jury:)

The Court: What is that number after 3-U?

Mr. Cheatham: May I correct the record? I was wrong. It is in our list of exhibits three times, and I was under the apprehension that it had gone in once already. It will remain 3-U in all cases.

The Court: It is not 3-I because we just checked, and the reason I did not talk to you is that

(Deposition of Ferdinand J. Bommer.)

I knew you were in error, and I thought Mr. Kolisch had the correct figure.

3-U is now admitted.

Mr. Cheatham: That is right.

(Potter 20-page ad in Electrical Refrig. News, February 24, 1932, previously identified as Plaintiff's Exhibit 3-U for Identification, was received in [523] evidence.)

The Court: It may have been admitted other times, but we are sure it is in now.

Mr. Cheatham: I think it is marked 3-U in all other instances.

The Court: Mr. Byron, I want to say this, that I was under the impression that you were correct in connection with the portions stricken with reference to Sanitary Corporation, and then on cross-examination there is a considerable amount of testimony that could only be relevant in connection with the testimony on direct that was stricken.

Mr. Byron: I am perfectly willing to strike everything that corresponds.

Mr. Cuningham: I am not, your Honor. I think it is very vital.

The Court: I am not going to strike any portion of the testimony that has been read, but I suggest you go over this cross-examination and any portion that relates to portions that have been stricken on direct, you can make a motion on that, and I will rule on it.

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Mr. Byron: You are expecting me to make a motion to strike. I do not want to make such a motion, but I will tell you what I think corresponds to the parts that have been stricken, and I have no objection to it being stricken.

The Court: You do not have to make a motion; you just [524] tell me what portions relate to the direct examination. Tell me about 9:00 o'clock in the morning, and have a copy for Mr. Cuningham and one copy for me, just a penciled notation. I will check it immediately.

Mr. Byron: From Page 71 on?

The Court: Yes.

Mr. Byron: Correct.

The Court: There is one other thing. Perhaps you can get together with Mr. Cuningham on other portions which both of you may regard as irrelevant. Do you know of any such thing?

Mr. Cuningham: Your Honor, I had the whole last part of this, and I withdrew my——

The Court: I do not think that is irrelevant; I think that is extremely relevant.

Mr. Cuningham: I am sorry, sir; I am sincere. I think the whole thing is very relevant, and I think it should go in. I think it is vital.

Mr. Byron: Well, I will do as you ask me, your Honor, and then it is in your hands.

The Court: Let me take a look at it because these depositions are taking much longer than I anticipated they would.

(Deposition of Ferdinand J. Bommer.)

(Discussion off the record.)

Mr. Byron: I might say that we had agreed as to what parts would be included and what would be excluded. Now this [525] morning in chambers Mr. Cuningham said that he had changed his mind and that he wanted more portions of certain depositions in, and I said, "Well, what portions are they," and then it was suggested that we get into the court-room. Well, I don't know yet.

The Court: Is there very much more, Mr. [526] Cuningham?

Mr. Cuningham: Of the Admiral deposition, sir?

The Court: Yes.

Mr. Cuningham: Yes.

Mr. Byron: Call those Potter depositions taken of Admiral offices or employees.

Mr. Cuningham: Well, sir, I think we can—we won't take the big, thick volume—that is the thickest volume that your Honor has. We are going through and select parts, as I understood, that we intended to use. But I say in view of the amount of the testimony that has apparently been stricken here, I will need some of this. Of course, this is the testimony out of the mouths of the——

The Court: I am not trying to restrict you, Mr. Cuningham. I will let you put in anything you want as long as it is relevant.

Mr. Cuningham: I will say that I will do my very best.

The Court: When will we know? That's what I

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would like to find out because under my ruling, if you read portions Mr. Byron can request that other relevant portions be read at the same time.

Mr. Cuningham: In our case?

The Court: In your case. And other portions unrelated to the portions that you read can only be put in on the defendants' case in chief. [527]

Mr. Cuningham: That's correct. I remember that.

The Court: So as far as relevant portions are concerned, Mr. Byron ought to know in advance what portions you are going to read from so he can ask the crier to read other sections.

Mr. Cuningham: Well, as you know, we have considerably more of Bommer for tomorrow, and then this Morton and Douglass deposition, a hundred and some pages. That will——

The Court: We won't get through.

Mr. Cuningham: So I think it will have to await Monday.

The Court: All right. If you can get together with Mr. Byron some time and agree on cutting things down I would appreciate it as far as the Morton deposition is concerned. If you propose to strike any or to object to any question and any answer will you let me know tomorrow?

Mr. Byron: Of Morton?

The Court: Yes.

Mr. Byron: Well, I will be glad to, but I thought Mr. Cuningham was going to tell me what parts he wanted in.

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: Oh, I have told you I wanted all from the very beginning. I want all of the Morton and Douglass.

Mr. Byron: All right. That settles it.

Mr. Cuningham: Let me call your attention, Mr. Byron, to a note I have against my interest, "Defendant has indicated, I think, that he wants to strike from page 310, line 15, the [528] balance of the page, and through 314."

Now, I haven't looked at the pages. We didn't agree on that, but I noticed that on the outside of my deposition. I believe my note is accurate and I think it's the only thing he wants to strike.

Mr. Byron: Well, I have notes on that.

The Court: If that's the case, fine. But I was hoping that maybe you would be able to strike some more.

Recess until tomorrow.

I want to make one suggestion to you all. You only have to ask one question not to exceed two times, and where the same question is asked in the depositions four or five times, may I suggest that you strike out one or two of those?

(Whereupon, at 4:10 o'clock p.m. an adjournment was taken until 9:30 a.m. Friday, November 18, 1955.) [529]

(Deposition of Ferdinand J. Bommer.)

Portland, Oregon, Friday, November 18, 1955

(At 9:30 o'clock a.m. proceedings herein were resumed pursuant to adjournment as follows.)

The Court: I see we are all here.

Mr. Cuningham, I think Mr. Hart was reading the Bommer deposition at the time we adjourned last night. Do you want to continue with that?

Mr. Cuningham: Yes, please.

The Court: All right. I suggest that you start at the bottom of the page on page 70 to get a little continuity.

DEPOSITION OF FERDINAND J. BOMMER

Cross-Examination

(Continued)

By Mr. Lucas:

"Q. How many would you say, at the [illegible]e? How many refrigerator companies was Rex manufacturing cabinets for at the time that Rex was manufacturing cabinets for Potter?

A. I don't think Rex ever had more than two contracts in any one year.

Q. That would be four different companies?

A. Four different companies.

Q. And how many different lines were there at Rex Manufacturing Company for making and assembling these refrigerators?

A. Production lines?

(Deposition of Ferdinand J. Bommer.)

Q. Yes.

A. Usually four. Sometimes three. Depending on the models that were being produced at the particular time.

Q. There were six, weren't there? [530]

A. Could have been six, yes, sir, at times.

Q. Yes. And the Potter cabinets were being made at the same time these others were made, were they not? A. Yes, sir.

Q. So Stewart-Warner was not the only company having cabinets made for its refrigerators at the same time that Potter was having cabinets made at Rex. Is that correct? A. That's correct.

Q. Now we have been speaking about the Frigidaire Company, or the company that makes the Frigidaire refrigerator, as having a compartment in which ice cubes could be made, and you said that those ice trays could be removed and you could place therein, up to its capacity, any other food that you desired to have frozen. Is that correct?

A. That's correct.

Q. How large would you say the measurements of the freezer were at that time in the Frigidaire refrigerator?

A. I would say the average sleeve, ice cube sleeve, in the Frigidaire refrigerator at that time, was about two inches or about two and a quarter inches high, and about six inches wide, and about approximately eleven inches deep. Large enough to take a little two-pound can, would hold two pounds of water.

(Deposition of Ferdinand J. Bommer.)

Q. They did make them of variable sizes, did they not? They had several layers of them?

A. There was more trays than one, yes, sir. [531]

Q. Oh, yes; sure. So that instead of two inches it would bring it up to about what? Ten inches?

A. Each tray was on a shelf by itself. It was divided.

Q. That's right. So instead of being two inches, the total height there might be ten or twelve inches, total height?

A. Not unobstructed height, no. There would be two-inch slots.

Q. Were those partitions removable?

A. In most cases, no.

Q. But in some cases they were?

A. Some cases they were.

Q. Now it is purely a question of degree, isn't it, how much, how large, you want to make that freezer compartment?

A. No, sir; it is not. It is strictly an engineering rule.

Q. No? If an engineer desired to make a refrigerator freezing compartment larger or smaller he could do that, couldn't he? A. No, sir.

Q. Why not?

A. It takes so many square feet of refrigerating surface on a cooling unit to cool a given capacity of food compartment. If the cooling unit is increased in size, the temperature at which that cooling unit must operate must be made higher, higher

(Deposition of Ferdinand J. Bommer.)

temperature, operating temperature, so that it will not cool the surrounding air in the fresh food compartment too cold. As you increase the temperature, operating temperature [532] of the cooling unit, you also decrease the value of that cooling unit for its ice-making capacity, ice cream capacity, or the keeping of frozen foods.

Q. Apparently you misunderstand my question. The only point I am trying to make is this: If you wish to increase the size of the, well we'll say the freezer, you can do so, assuming, of course, that you increase the size of your refrigeration units so that you can cool a larger quantity of food, or a smaller quantity of food, as you desire. That can be done? That's within the capacity of an engineer, is it not?

A. It is not, no.

Q. Why isn't it, then?

A. If you want to cool a room, a cooling unit that size, you would have to run at 200 below zero to get any effect of it at all. If you wanted to cool that same room with the cooling unit the size of this desk, we would have to run it a lot warmer than that. In fact, we would run it so warm that water or food put in contact would not freeze because it would be above the freezing temperature. It has to be proportioned.

Q. Well, now, at the present time the refrigerators, modern refrigerators, have a freeze storage space that you will say will take 70 to 80 pounds?"

Mr. Cunningham: Your Honor, I believe the crier

(Deposition of Ferdinand J. Bommer.)

inadvertently omitted an answer—part of an answer there on page 74.

The Court: "I said the size of a pack of [533] cigarettes?"

Mr. Cuningham: Yes, your Honor. I think it makes graphic what he is talking about.

The Crier: I'm sorry. That's crossed out on my copy.

Mr. Cuningham: "I said the size of a pack of cigarettes."

The Crier: "I said the size of a pack of cigarettes."

Mr. Cuningham: Thank you.

Mr. Lucas: "Q. Well, now, at the present time the refrigerators, modern refrigerators, have a freeze storage space that you will say will take 70 to 80 pounds? A. Yes, sir.

Q. Well, now, then, that space is larger than the freeze space, is larger than the freezing space we are referring to, in the Frigidaire construction?

A. Yes, sir.

Mr. Byron: Now that's all I'm talking about.

Q. If you want to increase the size of your freezer space around that small capacity, we'll say, of the Frigidaire, to the size of the freezer in the modern refrigerator, it can be done, can it not?

A. By making the refrigerator into a two-compartment refrigerator, either by means of the definite partitions, by insulation, or a series of shields which accomplish the same effect as a partition between the compartments.

(Deposition of Ferdinand J. Bommer.)

Q. And you could vary the size of this so-called modern freezer from 80 pounds to 120 pounds, could you not? [534]

A. That's correct; by shielding or partitions.

Q. And that's within the ability of a refrigerator engineer? A. That's right; yes, sir.

Q. That's what I am driving at all the time—but not the ability in 1938 or prior to that. What I am trying to say is that the size that you have is merely a matter of degree in that regard?

A. Increasing the size of your freezer space is not a matter of degree; it's a matter of shielding or partitioning.

Q. Well, of course, you can have, it's true, a two-compartment or two-car garage or a three-car garage or a one-car, and you may have some partitioning in there, different supporting apparatus, but you have that ability. It's a matter of degree, your size, is it not?

Mr. Berner: I object to the form of the question. Would you frame your question without garages and everything else in them?

Mr. Byron: No. It's all right; he knows what I'm talking about.

The Witness: I am lost.

(The question was read back by the reporter.)

Q. Your size is a matter of degree; it comes down to that?

(Deposition of Ferdinand J. Bommer.)

A. I just don't understand the question. I am sorry, sir. I would like to.

Q. If you had a refrigerator with the freezer space that [535] would contain 40 pounds of food for freezing, say, it's purely a matter of degree to build one with an 80-pound freezer, is it not, capacity?

Mr. Berner: Are you referring to the compartment; two-compartment or one-compartment box?

Mr. Byron: We'll say two.

A. Yes. That's in two-compartment refrigerators. That's correct, yes.

Q. Sure. Purely a matter of degree, the size?

A. That's right.

Q. How many different companies did Potter approach with the thought of granting a license to them?

A. In exact numbers I wouldn't know. At different times there were several companies approached.

Q. Altogether, how many different companies, and who were they, that he approached?

A. Well, of course, he approached Stewart-Warner; he approached Apex.

Before I continue my answer, are we talking about companies that Potter approached, only? Or companies where there was an approach, whether it was from the company or from Potter?

Q. Where there was an approach, whether it was from the company or from Potter.

A. Oh, yes. [536]

(Deposition of Ferdinand J. Bommer.)

Q. That is, Potter or Potter Company.

A. There were negotiations, that is, talk.

Q. That's right. And he was changing corporations all the time. That is, when I say 'Potter,' I mean Potter and his many corporations.

A. That would call for some revision because we were approached by Stewart-Warner. We were approached by Apex.

Q. Let's put it both ways. Put it both ways, then, if that will make it easier for you.

A. There were some few preliminary discussions with Kelvinator. There were discussions with Atwater Kent. There was a letter written, as I remember it, today to Frigidaire. There was some talk with Norge. I think that, generally, is about the scope of things. There might have been others.

Q. And none of those took a license under the Potter patent?

A. Apex took a license under the Potter patent.

Q. Did any of the others?

A. And Sanitary.

Q. You hadn't named that as one that was being approached.

Q. And Sanitary's approach was one of those things that just grew. That was all. You don't know.

Q. Now none of these large companies that you mentioned, such as Frigidaire, took a license?

A. No.

Q. You have laid great stress upon the question of changing [537] from so-called single-compartment box to a two-compartment box. Do you regard

(Deposition of Ferdinand J. Bommer.)

the provision of the two-compartment box instead of one, or from two to one, a major structural feature of importance? A. I do.

Q. And in your opinion, did that add greatly to the success of the so-called Potter refrigerator?

A. The change from one to two compartments? Yes.

Q. You have also referred to the expansion valve as being of importance. Now just in what way do you regard that expansion valve of importance in the Potter construction?

A. An expansion valve, or some restricting mechanism, is a necessity in the operation of any refrigeration system. The expansion valve is important inasmuch as it measures the amount of refrigerant that is permitted to expand, go through the system.

Q. Yes. And it controls, the first, the flow of the refrigerant from the high side of the line, or compressor side, to the freezing coil?

A. To the low side, yes, sir.

Q. To the freezing coil. And in that regulation what happens? In the regulation by the expansion valve?

A. Well, with the regulation of the expansion valve you cause a predetermined pressure reduction which permits the liquid passing—— [538]

Q. Liquid refrigerant?

A. Liquid refrigerant passing through the valve to pick up heat and expand.

(Deposition of Ferdinand J. Bommer.)

Q. Well, now, what causes the liquid refrigerant to pick up heat in the freezing coil, that is, just beyond the expansion valve?

A. Well, the nature of the refrigerant itself is that it boils at a temperature lower than the temperature surrounding it.

Q. And then in boiling, that's what in a sense you call expanding. I suppose you could call it vaporizing, also? A. Vaporizing.

Q. In so doing, the refrigerant has absorbed heat in the freezing compartment, thereby lowering the temperature in the freezing compartment to the desired low temperature which you have indicated to be about zero degrees Fahrenheit. That's correct, is it not? A. That is correct.

Q. Now you have described the Potter system in which you mentioned that the refrigerant, upon leaving the freezing coil, passes into the cooling coil in the upper, or warmer, chamber. That is correct, is it? A. That's correct.

Q. Now, then, those two coils are in series, are they not? A. Yes, sir. [539]

Q. In other words, it's one continuous coil?

A. One continuous coil.

Q. Part of it being the freezing coil in the freezing chamber and the other part being in the cooling coil in the warmer upper chamber?

A. Yes, sir.

Q. Now what happens to the refrigerant which passes from the freezing coil to the cooling coil in the upper warmer compartment?

(Deposition of Ferdinand J. Bommer.)

A. It flows through the coil, and as it strikes the warmer temperature of the upper compartment it expands further, shall we say? In laymen's language. In the upper compartment there is still some refrigerating effect left, some vaporizing effect left, which takes place and which cools the upper compartment.

Q. That is to say, the refrigerant which has come from the freezing coil to the cooling coil in the upper compartment absorbs, causes the absorption of, some heat from the upper warmer compartment? A. That's correct.

Q. And then the refrigerant is drawn back into the compressor? A. Yes, sir.

Q. Now, is it a fact that the expansion valve is therefore vital in controlling the relative heat absorption in the freezing compartment and in the upper warmer compartment? [540]

A. It's vital to the extent that it's one means of creating a temperature difference.

Q. I am speaking about the disclosure that Potter made. A. That's right.

Q. (Continuing): So that we can be specific.

A. That time, the expansion valve, was the way it was done.

Q. Yes. And that performs a vital part in controlling the action of the refrigerant in the two sections of the coil? A. Yes, sir.

Q. For performing the functions therein?

A. That's correct.

(Deposition of Ferdinand J. Bommer.)

Q. That expansion valve can be set to a fair nicety"——

Mr. Cuningham: "Valve can be set to a fair nicety."

The Court: Is the word "valve" or "coil"?

Mr. Cuningham: It is "valve." We have agreed on that correction. It is an obvious mistake.

The Court: Go ahead. Read the question over again.

Mr. Lucas: "Q. That expansion valve can be set to a fair nicety to regulate the flow and the effect of the refrigerant in those two separate sections of coil. Is that correct?

A. I say that an expansion valve is one way to do it.

Q. Well, I know, but I saw——

A. (Interrupting): It can be. It can be done with a nicety.

Q. With a fair exactness, is what I am talking about.

A. I would say that with a capillary tube you could do the [541] same thing.

Q. Please answer the question. I would like to just stick to what Potter had in his device. Now with that expansion valve you can control the flow of the refrigerant through the freezing coil and the upper cooling coil with a fair degree of nicety?

A. Yes. Yes, that's correct.

Q. So that you will get a proper freezing effect in the freezing compartment and the proper cooling

(Deposition of Ferdinand J. Bommer.)

effect in the cooling compartment, which is slightly warmer, or somewhat warmer? A. Yes, sir.

Q. And, of course, there is only one refrigerant that's used. It is the same refrigerant which passes from the compressor and the receiver through the expansion valve, and through the freezing coil and the cooling coil, and back through the compressor. That's all the same refrigerant, is it not?

A. In any one cabinet, or any one system.

Q. Well, in the Potter system. What Potter uses. I am talking about what Potter showed you.

In the earlier refrigerators, such as Frigidaire, when they had the central compartment as distinguished from the two compartments, if a piece of meat, for example, had a cover put over it, it would be protected; it would not dehydrate, [542] would it?

A. No. When I say "no," I mean it would tend to slow it down tremendously so it would practically stop if it was covered tight.

Q. Yes. And that would be true, no matter whether the food was lettuce or celery or vegetables of all kinds, and fruit? A. That's correct.

Q. So that substantially the same effect could be accomplished and was accomplished in, say, the Frigidaire machine, for example, having the single compartment where the foods were covered?

Mr. Berner: The same effect as what? I'm sorry. Would you clarify?

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: Well, the same effect as in the Potter arrangement.

A. Are you limiting my question to dehydration, only?

Q. Oh, yes. Sure. Dehydration, only. Strictly that.

A. Under that condition, I would say that dehydration would be less, or tend to be negligible.

Q. Yes. So they were both——

A. (Interrupting): Dehydration, only, we are talking about.

Q. Yes. So that they would both be on a par under those circumstances?

A. As far as food preservation is concerned, no.

Q. I said "dehydration."

A. Dehydration-wise, yes. Food preservation-wise, no. [543]

Q. Now what have you to say, then, with respect to food preservation in the single-compartment refrigerator when the food is covered, say, in a glass dish?

A. I would say that the dehydration is less in the covered dish. The deterioration of the food rotting in its own air is greatly increased. What you gain in one, you lose immediately in the process of decomposition in its being confined in its own decomposing air.

Q. Placing a pound of steak in a glass receptacle —I mean any glass dish with a cover on it—and in a single-compartment refrigerator how long would

(Deposition of Ferdinand J. Boxmer.)

it take for that piece of steak to be spoiled so that it would not be edible?

A. First of all, I would say that it is an impossible question to answer. The condition of the steak that was put in there, the temperature of the compartment that it was put into, and many other things—that would make that almost an impossible answer to give.

Q. Let us assume some conditions. Let's assume a temperature, to begin with, between 40 and 45 degrees, as used in the warmer compartment of these two-compartment refrigerators. Under those circumstances, under that circumstance, and under the further condition that it was fresh when it was put in the refrigerator, how long, then, would you say that it would take that piece to spoil?

Mr. Berner: When you say "fresh," you [544] mean——

Mr. Byron: From the butcher.

A. What you are talking about is prime meat?

Q. Yes.

A. I would say probably four days.

Q. And what would you say if the meat had been fried or boiled and then placed in a covered dish in the refrigerator, the single-compartment refrigerator? How long would it take?

A. I would say the test shows they run about double that.

Q. About eight days? A. About that.

Mr. Berner: Nine days more?

(Deposition of Ferdinand J. Bommer.)

The Witness: Double the time. Four and four is eight.

Mr. Berner: Not eight days more; a total of eight days?

The Witness: A total of eight days.

Again you have got some variations. How big is the kitchen in comparison to the piece of meat? There are a lot of factors. We run tests for years and years and years and there are so many factors that are involved.

Q. Now, these hydrator plans and other accessories used by some of the companies in their refrigerators do help a great deal in preventing dehydration, do they not?

A. They did; in preventing dehydration, yes.

Q. Did they do any good from a standpoint of preventing spoiling of, say, the meat?

A. Not over a negligible amount. [545]

Q. Well, then, let's go back to your old illustration. We have a raw piece of meat, fresh, and it's placed in a single-compartment in a glass-covered dish, and there, you said it would take four days before it would be dehydrated appreciably. Now let us assume that this same refrigerator is provided with a dehydrator pan. Would that then take longer to dehydrate that meat?

A. I would say that that, between that and the covered dish, would be almost the same.

Q. In other words, the dehydrator did no good at all. Is that your answer?

(Deposition of Ferdinand J. Bommer.)

A. I would say that, from the standpoint of the spoilage, from that——

Q. We are talking about the dehydration from the standpoint of dehydration.

A. From the standpoint of dehydration, the dehydrator pan and the covered dish did not permit the dehydration as rapidly as without it.

Q. Well, would the use of the hydrator pan cause the meat to dehydrate slower?

A. Slower, yes.

Q. So that instead of four days, how long would that meat go without being dehydrated?

A. Well, again, to me, it becomes involved. We are talking about two different things, here, and I claim that you can't [546] divide the one from the other.

Q. Well, I know, but I have taken an example where you say the meat, covered, in a single-compartment refrigerator, will last four da without being dehydrated materially?

A. That's right.

Q. Now, then, you say—let us put a dehydrator pan in that same single compartment, and will that cause the meat to last longer from the standpoint of dehydration?

A. No longer than in the covered dish. [547]

Q. In other words, the dehydrator adds nothing?

A. Not in comparison to a covered dish, no.

Q. So——

A. (Continuing:) To me they are one and the

(Deposition of Ferdinand J. Bommer.)

same thing. What difference does it make whether you have a hydrator pan which is covered, a covered dish, or you talk about a covered dish? We are talking about one and the same thing.

Q. I see. And what is your answer with respect to a head of crisp lettuce that's placed in the refrigerator and covered, we'll say, in a glass dish? How long would it take?

Mr. Berner: What type refrigerator?

Mr. Byron: Single compartment.

A. We are limiting all these questions now to single-door?

Mr. Berner: Conventional type refrigerators?

Mr. Byron: Single compartment. Conventional or otherwise.

A. In a hydrator dish or a covered dish, which is the same?

Q. Well, we'll say covered. Yes.

A. If it was a good, crisp head of lettuce at the time it was put in the refrigerator, if it was between 40 and 45 degrees, it would probably last about 48 hours without showing definite signs of dehydration. Beyond that you would definitely show it was dry. [548]

Q. Well, you would know that it was drying. It would not be entirely dry, would it?

A. No. It wouldn't be entirely dry, but it would be a poor looking piece of lettuce.

Q. How long would it be good?

A. The center of it might be good after 3 or 4

(Deposition of Ferdinand J. Bommer.)

days, but that's all. You would waste about two-thirds of it. You might get a little core in the middle of that, as the dehydration tended toward the center.

Q. Putting it in a covered dish would help, anyhow, wouldn't it? A. That's right.

Mr. Berner: Were you referring to dehydration only, now?

Mr. Byron: Oh, yes.

The Witness: Yes.

Q. It was old, in the commercial-type refrigerator, to have the two separate compartments; one, for the freezing compartment and the other a compartment which would have a temperature, say, between 40 and 45 degrees Fahrenheit. That is correct, is it not?

A. And a low temperature.

Q. I said freezing. A. Freezing?

Q. Yes. That was old in the commercial [549] machines? A. Yes.

Q. Prior to Potter's conception? A. Yes.

Q. And you know of one such installation, I think, that you made, or your company made, at the Statler Hotel in New York, was it?

A. I made a lot of them.

Q. I see. A. I made a lot of them.

Q. And so the freezing compartment for ice cream, we'll say, preservation of ice cream, and the warmer compartment, say, for the preservation of salads, was separated, were they not?

A. Yes, sir.

(Deposition of Ferdinand J. Bommer.)

Q. And by insulation?

A. Yes, sir. And just as much separated by refrigerating systems that cooled them.

Q. Well, now, wait. They were separated?

A. Yes, sir.

Q. So that you did maintain a zero degree Fahrenheit temperature in the freezing compartment, and, say, from 40 to 45 degrees in the warmer compartment? A. That's right.

Q. Now, do you know what type insulation was used and the quantity of insulation? In the commercial refrigerators? [550]

A. It varied from 3 to 4 inches in the normal storage, the vegetable storage, to 5 to 6 inches in the lower storage side.

Q. So there was that much of a differentiation in the insulation between the two compartments?

A. That's right.

Q. So that, from an insulation standpoint of view, Potter didn't suggest anything new from that point of view on the differentiation of the amount of insulation around the freezing compartment and around the warmer compartment?

A. He suggested it insofar as domestic refrigerators were concerned.

Q. I mean, broadly speaking.

A. I don't know. How broad can you get? I don't mean to be facetious now.

Q. Well, I said, these commercial refrigerators, aren't they? A. Yes, sir.

(Deposition of Ferdinand J. Bommer.)

Q. And they do have the freezing compartment for maintaining ice cream, for example, in a frozen condition? A. Yes, sir.

Q. And they have a warmer compartment, say, between 40 and 45 degrees, for properly preserving salads and what other foods usual to place in there?

A. That is correct. [551]

Q. Now, then, around the freezing compartment you have an insulation thickness that's up to about 6 inches, did you say? 5 or 6?

A. It was, I mean, that varied.

Mr. Berner: When you say 'commercial refrigerators,' you are referring to——

Mr. Byron: I am referring to any size that would be used in the butcher shop or in the hotel or any business institution as distinguished from one in your kitchen. One in the home kitchen. Private family kitchen.

Q. I'll get back to the question. Then you used about a 5- or 6-inch insulation around the freezing compartment in a commercial-type refrigerator?

A. Right.

Q. And about 3 to 4 inches around the warmer compartment? A. That's correct.

Q. So that there was used, prior to Potter, refrigerators having a freezing compartment and then having this cooling compartment about 40 or 45 degrees with insulation of one thickness, greater thickness around the freezer, and a smaller thick-

(Deposition of Ferdinand J. Bommer.)

ness of insulation around the warmer compartment. That is correct, isn't it?

Mr. Berner: You are referring to commercial refrigerators?

Mr. Byron: Yes. I previously added that. [552]

Mr. Berner: Not the last question, but you did earlier. I just wanted to be sure you are carrying through the same context.

Q. Now, answer the question.

A. I say they were.

Q. Is that a proper answer?

A. I think that's correct. You said, did I know whether there were commercial refrigerators made with?

Q. Yes. And that was along prior to the advent of Potter and Bronaugh, his co-patentee?

A. Yes, sir.

Q. Now, the function (I am speaking only of the function now, in maintaining the freezer) for keeping foods frozen, and the warmer chamber for keeping foods at a temperature of 40 to 45 degrees, functionally, is the same in the commercial refrigerator as it is in the domestic refrigerator, is it not?

A. For maintaining those temperatures? No.

Q. Functionally?

A. Functionally it is not. The machine is, the mechanical part is, entirely different.

Q. No. I am not talking about mechanics. I am talking only about function, now. In other words, the function of the freezing in the freezing com-

(Deposition of Ferdinand J. Bommer.)

partment and the proper cooling to 40 to 45 degrees in the warmer compartment, that [553] functional action is the same in both? That is to say, you do have below freezing in the one compartment and between 40 to 45 degrees Fahrenheit in the other?

A. Yes, sir.

Q. The Jewett Company to which you referred for many years made only the cabinets for commercial refrigerators. Is that correct?

A. No. I wouldn't say that is correct.

Q. They made them for——

A. (Interrupting): They made a majority, but let's say, of commercial refrigerators, to total dollars of business. In quantities, they undoubtedly made as many, if not more, household refrigerators.

Q. That's just the cabinet itself?

A. Yes, sir.

Q. Or did they ever make a complete machine?

A. They never manufactured a compressor or condensing unit assembly.

Q. Look, did they sell a refrigerator in its completed condition, having manufactured the cabinet itself, and then purchased the other parts and installed? A. Assembled and installed.

Q. They did sell those? A. Yes, sir.

Q. In the household refrigerators of that [554] type? A. Yes, sir.

Q. And when did they start selling household refrigerators that way? Complete? (And I refer to the Jewett Company.)

(Deposition of Ferdinand J. Bommer.)

A. I would say somewhere around 1927, '28.

Q. That was when you were Chief Engineer?

A. Yes, sir.

Q. Did Jewett ever make any so-called Potter refrigerators? A. Yes. We made some.

Q. How many?

A. Without the record, I wouldn't know.

Q. Could you make an estimate?

A. Could have been 20; it could have been 50; could have been a hundred.

Q. That would be the completed machine? Completed refrigerator?

A. Yes. We made complete refrigerators.

Q. And did you make those for Potter's sale, by himself?

A. No, I wouldn't know. I couldn't answer that intelligently, at that time, what was done with them after they were shipped out of the Jewett factory.

Q. Well, you wouldn't know if it was the Jewett Company that sold that so-called Potter refrigerator or if Potter sold them?

A. No, no. Jewett never sold any Potter refrigerators. That I can tell you. [555]

Q. Well, that's the thing I was driving at.

A. Oh, yes.

Q. But, they did make maybe 25, 50 or a hundred? A. Somewhere in there.

Q. But they made that for Potter?

A. Potter Refrigerator Company.

Q. Now, then, you stated that, some time later

(Deposition of Ferdinand J. Bommer.)

(and I don't know what you meant by 'later') that the Jewett Refrigerator Company, or Jewett Company (I don't know its full name) manufactured complete household refrigerators and sold them. Is that correct? A. That's correct.

Q. And when did they start to do that?

A. Well, I don't think that there was any definite cessation of operations from the late '20's or the early '30's, right on through. It never was a sizable operation, but I mean it was something that continued. I know that in 1939, after I left Potter, they asked me to come back there to redesign a line of cabinets which they sent to the Farm Bureau. They sold to the Farm Bureau. They had an exclusive contract with the Farm Bureau out in Indiana, New York, and all those places.

Q. You have stated in your direct testimony that Potter brought to the Jewett Company, and you saw, his refrigerator in about 1931. I would like to clear up that word 'about.' [556] Could it have been in 1932?

A. No. It was earlier than that.

Q. You are sure it was in 1931?

A. Yes, sir.

Q. You don't know what part of 1931?

A. Not offhand, no.

Q. Well, you didn't know that in 1944, and, of course, I can't expect you to know it now.

A. It was well in advance of the ad? This ad? I say that it was well in advance of this February 24, 1932.

(Deposition of Ferdinand J. Bommer.)

Q. Which is the date of the publication known here as Plaintiff's Exhibit"——

The Court: Is that 3-UU?

Mr. Cuningham: It is 3-U, I believe, and that is now in evidence, as I understand.

The Court: Very well. The jury knows what exhibit that is. That is the one I showed you.

Mr. Cuningham: It is a 20-page ad.

"A. Electric Refrigeration News.

Q. You weren't certain, in your direct testimony, about whether this refrigerator which Potter submitted to Jewett at the time, you think, in 1931, had a compressor-condenser unit, installed in it? Did it or did it not? [557]

A. I have not been able to determine, or to go back in my memory, to ascertain whether there was an actual condensing unit in the box that Potter brought to us, which had not been operating for several months due to shipment from the West Coast and all that, whether it had a condensing unit in it which we took out to have dehydrated, which is necessary on the machine, isn't it? And repaired and reinstalled in the refrigerator, or whether there had been a unit in there and we obtained another unit and hooked the rest of the circuit up to run the box after it arrived at our office, because the box was delivered to the engineering department and stood in the engineering department. The works were run in our engineering department with the complete refrigerating cycle.

(Deposition of Ferdinand J. Bommer.)

Q. You did not see it run in complete?

A. Oh, yes. Sure.

Q. I mean, the original one that was brought to you?

A. I am talking about the day or the week that it was brought there. I don't remember whether there was a unit in it on arrival, which we had taken out and repaired so that we could run the box, or whether there was no unit in it and we put a unit in it and hooked it up and ran it. It's very definite that, there at some time, was a unit in that box and it had been in operation. There was discoloration, water film, on the finned coil. There was [558] water discoloration on the freezer shelf. And the connections down into the refrigerator showed that they had been hooked up to a machine at some time.

Q. I am not questioning you on that. I just wanted to know whether or not it was there, such a unit was there, and you saw it at the time that it was delivered to the Jewett Company.

A. I told you what my memory is, right now.

Q. Yes. I see. All right. In other words, your inspection of it at that time was not sufficiently minute to determine whether or not there was a motor-compressor-condenser unit in it at the time?

A. The inspection hasn't anything to do with it. The main thing to do was work on the cabinet.

Q. I understand that.

A. I will say that it wasn't minute enough to

(Deposition of Ferdinand J. Bommer.)

determine, or, I don't remember.

Mr. Berner: As a matter of fact, he doesn't remember, rather than the minuteness there.

The Witness: I say that it's a fact. We went over it; if you ever met Mr. T. Irving Potter, you go over everything minutely with him. I don't care what it is.

Q. Now you are inferring that you did go over it minutely, and I am asking you?

A. I'll say, then, that I don't remember [559] exactly.

Q. All right. Well, you don't remember.

A. All right.

Q. As I understand it, you had very little contact with Potter from 1931 to 1933. Is that correct?

A. Not too much.

Q. Well, how do you mean that 'not too much'?

A. If you see a fellow once, it's too much sometimes.

Q. How frequently did you see him, and how many times in that period?

A. That I don't remember. There were questions that came up once in a while. Potter's office had been moved to Buffalo. We were in Buffalo. It was easy to call up and ask for this, or about that. I went down to the office to see them probably not over a dozen times at the most in the two years. Maybe it was six times.

Q. Well, you were pretty well skilled in the refrigerator art in 1931, were you not?

A. I would say so.

(Deposition of Ferdinand J. Bommer.)

Q. And you knew of refrigerator constructions, prior to 1931, of various kinds, did you not?

A. Yes, sir.

Q. And you recall that there were commercial refrigerators with coils having fins on them for heat absorption for cooling purposes. That's correct?

Mr. Byron: Before 1931. [560]

A. As I told you, I am not in a position at this stage to locate that date.

Q. Well, you will admit that, when you testified in 1944, you did know?

A. I think I qualified my answer in 1944 by saying that there was a short period in there, they could have been before. I am willing to go that it could have been before.

Q. Don't you know, as a matter of fact?

A. I don't. No, I would tell you if I did. I try to be positive.

Q. And I am speaking about commercial machines.

A. I know what you are talking about.

Q. Well, assuming that, in a commercial refrigerator (and we will go back to whatever date we want to before 1930), before 1930, there were cooling coils with fins on them, and on that assumption, that there were cooling coils on fins in a cooling compartment in, say, 1940, the function of the finned cooling coils would be the same, namely, to give a greater cooling surface, or greater heat absorption surface. That's correct, isn't it?"

(Deposition of Ferdinand J. Bommer.)

The Court: What page is the answer on?

Mr. Cuningham: We have agreed, apparently, to take out the answer and skip to 104, according to my notes. I am not sure it is correct. [561]

Mr. Lucas: "Q. First, I will say, you mentioned that Fridigaire was the"——

The Court: Wait a minute. Is that the answer on about the sixth line, about ten lines or nine on page 103, "If the tubing or vehicle"—isn't that the answer? Have you agreed to delete that answer?

Mr. Cuningham: Yes, sir; I think we should put it in.

Mr. Byron: I think it was an oversight.

The Court: Put it in.

"A. If the tubing or vehicle to which the fins were applied were the same, and the fins were the same, and if the refrigerant was the same, they would naturally be the same.

Q. Cooling fins or heat-absorbing fins, there were, prior to 1930 or 1929?

A. I think we used fins on automobile radiators and things of that type before that. Yes."

The Court: That is enough. Now go to Page 104.

Mr. Cuningham: It is the last two lines on 104.

The Court: Go ahead.

"Q. First, I will say you mentioned that Frigidaire was the greatest producer in volume of re-

(Deposition of Ferdinand J. Bommer.)

frigerators in, let's [562] take the period between 1930 and 1940. Is that correct?

A. I would say that's correct.

Q. And then what company would you say is the next largest producer?

A. I would say that, during those years, Frigidaire and General Electric were approximately 1-2 during that period. I think some years General Electric may have gone ahead a little bit and Frigidaire went ahead other years a little bit. It was a close race. You had General Electric, Frigidaire, and from there down, you had Kelvinator, and, some years, Sears Roebuck with their Sunbeam operation came in to the top four or five, but there was General Electric and Frigidaire, just about, and I think Frigidaire has been the largest producer.

Q. Now, take those large companies which you have mentioned. What per cent of the total volume did they sell?

A. Of the top five companies in the country?

Q. Yes. Or, take the top three. Take, if you like, Frigidaire, General Electric and Kelvinator as No. 3.

A. I think Kelvinator was in third place at that time.

Q. All right. Just take those three.

A. Probably, I'll say, at least 50 per cent.

Q. And all of the other companies manufactured and sold the other 50 per cent?

A. I would say that's right. [563]

(Deposition of Ferdinand J. Bommer.)

Q. What were those other companies that sold that second 50 per cent?

A. Apex, Stewart-Warner, Westinghouse, Leonard, Norge, Montgomery Ward. For a couple of years Atwater Kent. From there on it was sloughed off into a lot of little companies. Sanitary made some, Jewett made some, various companies all over the country.

Q. Now, while these other companies, smaller companies, to which you referred, sold relatively few as compared with the larger companies, they still continued to exist on a profitable basis as going concerns, didn't they?

A. I would say, again, I wouldn't be in a position to analyze the financial statements of all these companies because Westinghouse operation was subsequently subsidized through the entire Westinghouse corporation. Norge has also been a division of the Borg-Warner Corporation, and so forth.

Q. Take the smaller companies that were not so-called subsidized.

Mr. Berner: Such as?

Mr. Byron: Well, he will have to name them. He named about seven or eight.

Q. You give the names of them.

A. I don't understand how you are going to put a financial rating as to whether they were successful or not. [564]

Q. They continued in business for many years? Just put it that way. A. Yes.

(Deposition of Ferdinand J. Bommer.)

Q. And are some of those companies still in existence, selling refrigerators?

A. Some of them are, yes.

Q. And are they still on the small side, making relatively few refrigerators as compared with larger companies? A. Yes, sir.

Q. And still in business? A. Yes, sir.

Q. Now, you were with Potter and his organization from December 1st, 1935, and June 1st, 1939. That is correct, isn't it?

A. Yes. That's correct.

Q. Which year of those years did Potter have the largest business in the two-compartment refrigerator?

Mr. Berner: Are you referring to dollar volume or number of units there?

Mr. Byron: Number of units.

A. I would say probably 1934 or 1935.

Q. The business declined, the Potter business, in the two-compartment refrigerators, declined from either 1934 or '35 to 1939, did they not?

A. The business didn't decline. Production broke our back. [565] Any business declines if you don't have merchandise to ship.

Q. Well, his business declined, then, insofar as selling refrigerators is concerned?

A. Insofar as producing refrigerators is concerned. Insofar as selling them, too, under the circumstances."

(Deposition of Ferdinand J. Bommer.)

Mr. Lucas: Wait a minute. Hold it.

Mr. Cuningham: That is in. My notes show that is in.

The Court: Let it go in.

Mr. Lucas: "Insofar as selling them, too, under the circumstances. You can't sell an item if you don't have them."

Mr. Cuningham: That is what I am objecting, part of his answer.

The Court: You are objecting to his answer?

Mr. Cuningham: I am objecting to their reading that as a question when I think that is part of his answer.

Mr. Byron: Your Honor, there is a question mark before it. Now, maybe we are mistaken in reading it for an answer, if there was a question mark, but it is all an innocent mistake. It is there in the record. We just read a question.

The Crier: It has been erased on mine.

The Court: Go to Page 109 at the top. [566]

Mr. Cuningham: I would like to have the answer, if I may.

The Crier: "A. Insofar as producing refrigerators is concerned. Insofar as selling them, too, under the circumstances. You can't sell an item if you don't have them. [567]

Q. But the Jewett Company served all of the largest companies, such as Frigidaire, General Electric and Kelvinator, as manufacturers in designing of their cabinets, did they not?

(Deposition of Ferdinand J. Bommer.)

A. That's right. That's correct. It costs a lot of money to put a line of refrigerators into production and we could not afford to go in there. We spent a lot of time trying to work out some plan for the amortization of tools and dies for the money that it would cost the Jewett Company to put on that, to get that production schedule going, and we came up with one answer: The banks wouldn't let us have enough additional capital that you need, we needed immediately, to complete a production.

Q. Was that a lack of faith?

A. I wouldn't say there was a lack of faith between Jewett and Potter. The Jewett Company had me put an awful lot of time in on the Potter project and there was a lot of time spent in trying to work out the details of an arrangement to handle that production.

Q. What do you know about the efforts of Jewett to purchase, to borrow the money from the banks, so that you could set up the production line for the Potter Manufacturing Company?

A. I know what they went through, a tentative program. I can say that I know that I went through an extensive program to try to set up a basis by which we could handle Potter production, the quantity production, and it was all submitted [568] to the officials of the Jewett Refrigerator Company, and that the amounts involved were turned down by the Bank and that Mr. Edgar Jewett, the President of the company, reported to me that we

(Deposition of Ferdinand J. Bommer.)

couldn't do it because we could not get the financial backing. At that time we were extended on other obligations and they would not extend our backing to what we required at that time. I don't think the Potter name entered into it.

Q. And how did you regard the Jewett Company; as a successful type or an unsuccessful company?

A. Well I was with them from 1919 till 1933, and I went back from 1939 till the middle of 1940, and I always thought they were just about as good a company as you could find as far as—I don't know what you mean—how could you regard them?

Q. As a successful company?

A. I always got salary. There was never any difficulties about salary. They always paid their bills.

Q. Of course as Chief Engineer at one time, of one of the Potter companies, in connection with the manufacture and sale of two-compartment refrigerators, you knew the structure and operation of that Potter refrigerator well. Correct?

A. You're talking about the physical, the refrigerator, itself?

Q. Yes. A. I think so. [569]

Q. Now, so that we will all understand exactly these parts we are talking about, I am going to refer you to the Bronaugh and Potter reissue of Patent 23,058, in suit."

Mr. Byron: Your Honor, if it is agreeable to

(Deposition of Ferdinand J. Bommer.)

you, I will point out those parts on the chart on the easel.

The Court: I think that's all right. Where is the reissue patent?

Mr. Lucas: On the chart, your Honor.

The Court: Put that back a little and then neither Mr. Cuningham nor Mr. Maguire will have to look around it to see.

Can every member of the jury see that now clearly as Mr. Byron stands there?

(The jurors replied in the affirmative.)

Mr. Lucas: "I just want to refer to various parts by number so that we understand each other.

Now that reissue of patent in suit shows a cabinet 10, does it not?

A. 10. I imagine that is. It has a line pointing to the interior of the cabinet—10. Right there, points to it.

Q. Now, referring to that reissued patent named in suit, it has a cooling compartment 14, has it not?

A. Yes.

Q. And it has a freezing compartment 12, does it not?

A. It has a freezing compartment over here, do you mean? [570] 12 is a part of the evaporator right there. Freezing compartment is 13.

Q. Well, you will find that a part, 12, is the freezing compartment in which the ice cubes are formed. A. As part of the evaporator.

Q. No, part of the space. It's a freezer for ice cubes. A. Is a part of the freezing unit?

(Deposition of Ferdinand J. Bommer.)

Q. Yes. A. Yes. In the compartment."

Mr. Cuningham: May I note for the record that Mr. Byron just a moment ago, and I think correctly, designated the entire lower section there including both 13 and 12, as a part of the freezing compartment.

Mr. Byron: Well, I would be glad to point just exactly if you want, but I want to make it clear now, according to the specification of the Potter patent in suit, they say that this compartment 12 has a temperature of about zero degrees Fahrenheit; that's cold freezing.

Compartment 13 is for storing frozen foods at the temperature of about 20 degrees Fahrenheit and that is below freezing. So when you are speaking about the freezing compartment, I would like to have you tell me if you want me to point to both or to one, or to either.

Mr. Cuningham: Well, I think I have already told you, Mr. Byron, I think your last action was quite correct. I [571] think you were correct yesterday, too. I merely wanted to point it out. You have done everything correctly.

Mr. Byron: Thank you.

Mr. Lucas: "Q. All right. We will refer to it, to the freezing compartment here, 13?

A. Yes. That's all right.

Q. Now, then, referring to this same patent in suit, it has thermal insulation shown as 33?

A. Between the two compartments.

Q. Yes.

(Deposition of Ferdinand J. Bommer.)

There is insulation between the freezing compartment and the warmer compartment above, and between those two compartments and the outside, the ambient air. Correct? The sides and walls and top of the cabinet. That's correct, isn't it?

A. I'll buy it.

Q. Well, look. See? Does the refrigerator, Potter refrigerator, as shown in that reissue of patent in suit, have insulation along the sides; along its top; along the bottom of the freezing chamber and in between the freezing chamber and the warmer chamber above? A. That's right.

Q. And, of course, there's air in the cooling chamber 14, the upper one—has to be?

A. Correct. All right. In both chambers. [572]

Q. Yes. And then the freezing chamber, 12 and 13? A. Yes. That's right.

Q. Now referring to the same patent in suit, there is a cooling refrigerant coil, or expander? I am referring to this coil here.

A. That's all right.

Q. Is the answer "Yes"? A. Yes.

Q. I see.

A. I haven't seen this particular patent before till right this minute but I have seen enough of this old Bronaugh patent."

Mr. Cuningham: I wonder, Mr. Byron, if you would point out on Fig. 2 the expander?

Mr. Byron: Well, it just shows this small coil here (indicating).

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: That's the fin up there, is it not?

Mr. Byron: No, it is not a fin so far as I know, and I say it is not.

Mr. Cuningham: I think you are incorrect.

Mr. Byron: Well, all right. Let's argue.

The Court: But not now.

Mr. Cuningham: I want to note in the record he carefully refrained from pointing to Fig. 2 until I corrected it.

Mr. Byron: Now, listen, that's an insinuation, and I won't stand for it. It's simpler to point to one figure for [573] the jury so that they will have the complete view without being confused with another. I will be glad to point to both. Which is your desire? Shall I point to both?

Mr. Cuningham: I wish you would point to everything that you want to point to, and leave out nothing that is responsive.

Mr. Byron: All right. Just let me do it.

The Court: I think that Mr. Byron has the right to point to Fig. 1, particularly in view of the fact that all the questions were directed to Fig. 1 in the deposition.

Mr. Cuningham: Well, your Honor, I didn't so understand. I may be in error on that.

Mr. Byron: I think you are.

Mr. Cuningham: The witness, you see, was reading from the patent. No one was pointing anything out.

(Deposition of Ferdinand J. Bommer.)

The Court: You will have all the opportunity, Mr. Cuningham, to present your own case.

Mr. Byron: I assure you we are not trying to put anything over. It's all here very plain.

Mr. Cuningham: You make me feel very comfortable.

Mr. Byron: Good.

The Court: Go ahead.

Mr. Lucas: "Q. This is the exact duplicate. It has to be. A. Yes. [574]

Q. You can't show anything in addition.

And that same reissue of patent in suit shows a freezing refrigerant coil or expander 22, does it not? A. Yes.

Q. Now, there is a volatile refrigerant that passes through those expanders. That is correct, isn't it? A. That's correct.

Q. And that refrigerant, volatile refrigerant, passes through the compressor, through the condenser, through the receiver, then through the coil to the expansion valve 23?

A. You mean from the tube to the expansion valve?

Q. Yes. To the expansion valve 23. That's right?

A. Yes.

Q. And then to the expansion valve 23, and through into the freezing coil 22?

A. Go ahead.

Q. And then—well, did you say Yes or No?

A. Yes. Go ahead.

(Deposition of Ferdinand J. Bommer.)

Q. Then into the cooling refrigerant coil 25, up over here? A. Yes.

Q. And then back to the compressor?"

Mr. Cuningham: Would you mind pointing it out on Fig. 2, Mr. Byron?

Mr. Byron: Yes, I will be glad to.

The Court: Read it over again, and Mr. Byron will point [575] it out on Fig. 2.

Mr. Lucas: "Q. And that refrigerant, volatile refrigerant, passes through the compressor, through the condenser, through the receiver, then through the coil to the expansion valve 23?

A. You mean from the tube to the expansion valve?

Q. Yes. To the expansion valve 23. That's right?

A. Yes.

Q. And then to the expansion valve 23, and through into the freezing coil 22?

A. Go ahead.

Q. And then—well, did you say Yes or No?

A. Yes. Go ahead.

Q. Then into the cooling refrigerant coil 25"——

Mr. Byron: Just give me a chance to find that here. It doesn't show up here in this figure. There is no 25, but I know where it is.

Mr. Cuningham: I will have no difficulty showing it, your Honor.

Mr. Byron: I say there is no reference character 25 here, but I will point it out.

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: I think there is.

Mr. Ramsey: I think there is up on top.

Mr. Byron: Oh, yes. I see it now. I couldn't see it.

Mr. Cuningham: Funny what difficulties we have when we get to figure 2. [576]

Mr. Byron: Well, I don't know if I should stand for that or not; these insinuations are not professional.

The Court: I think, Mr. Cuningham, you ought to stop that.

Mr. Cuningham: Your Honor, I will say not one other word.

The Court: I think it was certainly uncalled for and the jury is instructed to disregard it.

Mr. Byron: I will try to point out that coil 25 in Fig. 2. It comes up—the coil comes up from the continuation of coil 22 up through this insulation and out here and out here (indicating at all times).

The Crier: "A. Yes.

Q. And then back to the compressor?

A. Yes.

Q. Now, there is a single liquefying unit there; it has a single compressor-condenser set, is there not? A. Condensing unit?

Q. Yes. And that takes care of the refrigerant passing through the entire system? A. Yes.

Q. Through the freezing coil and the cooling coil in the upper chamber? A. Yes, sir.

Q. And then there's a thermostat 31 in the upper compartment [577] 14 of that patent in suit?

A. Yes.

(Deposition of Ferdinand J. Bommer.)

Q. And the expansion valve is shown as 23. Is that correct? A. That's correct.

Q. Now, in this Potter reissue patent, 23,058, in suit, the cooling refrigerant coil is known as 25, isn't it? A. Yes.

Q. And according to the drawings, that coil is made of a plain round pipe, is it not?

A. Well, bent, of course—attached to the fins, or with fins attached to it.

Q. I didn't ask you that. I said, it's made of plain, round pipe, is it not, the coil 25?

A. That depends on what the definition of 25 is.

Q. Sure. That's exactly what I want. That was my next question.

A. I would say that, in reference to Item 25——

Q. What does the specification say?

A. It says: 'The food storage compartment is provided with a cooling coil 25, which draws refrigerant from the discharge of the freezing coil 22, and returns the same through the pipe 26 to the compressor 15.'

And 25 is pictured as a series of tubing to which fins are applied. [578]

Q. Where are the fins? Point those out.

A. Right here. Very plainly. Here's No. 20, and it shows the coil, part of the cooling unit. And over here in 25, it shows no coils but it shows the fin section of the cooling unit.

Q. Now, will you please refer to the specifications and state if you can find a mention of 'fins' at all.

(Deposition of Ferdinand J. Bommer.)

A. It doesn't have to have any fins at all.

Q. I don't want you to argue. I want you to answer the question. As I say, will you please refer to the specification of this patent in suit and see, point out, if the specification shows or describes fins in connection with the cooling coil 25 in the upper compartment 14 of the patent in suit?"

Mr. Lucas: 120.

The Court: 120.

Mr. Lucas: "Q. Please refer to the specification of the reissue patent in suit, read that specification, and state whether or not it mentions fins, and fins particularly on the cooling coil 25 in the upper, relatively warm, chamber 14.

A. There are two references 25 from the drawing. In the specification, No. 25 is described as a cooling coil. The words 'cooling coil' cannot be construed in any other way but to include both of the notations on the drawing which designate one figure 25 pointing to the coils and the other figure 25 pointing to the fins which support the coils. [579]

Mr. Byron: I object to that answer and I will move to have it stricken and I will now request the witness not to give any constructions of his own, but to please answer the question, and I will state the question again."

Mr. Cuningham: I thought we agreed to leave that out.

Mr. Lucas: I am sorry.

The Court: Did you agree to leave out that objection?

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: Well, frankly, I don't know. No, not the objection. I have got a notation here, "Move to strike," so I wouldn't leave it out.

The Court: Well, what is the situation? Do you have any objection to its being stricken?

Mr. Cuningham: Oh, yes, sir. I think it should stay in; very important. I see no reason for striking it. It's as relevant as it can be, responsive.

Mr. Byron: I have no serious objection at all.

The Court: Well, was Mr. Bommer qualified as a patent expert?

Mr. Byron: No, he is not.

The Court: The answer will be stricken and the interpretation which Mr. Bommer puts on that figure is of no consequence, and the jury is instructed to disregard it. Mr. Bommer has not been brought as an expert on patents.

Mr. Lucas: "Q. The question is: Refer to the specification in this patent in suit, read that specification, and state [580] whether or not you find the word 'fins' in that specification as related to the coil 25, or any other coil.

A. As a refrigerating engineer, the word 'fins' in the description is not necessary inasmuch as the drawing distinctly points to a—to both sections of the coil, and it is inclusive in the one unit.

Q. Will you now answer the question?"

The Court: Well, that question, the jury is also instructed to disregard that answer.

Mr. Maguire: If your Honor will hear us a moment——

(Deposition of Ferdinand J. Bommer.)

The Court: I can't hear you.

Mr. Maguire: ——an engineer, particularly an engineer who is experienced with a particular device, may describe what is in the drawing. That wouldn't be a matter for a patent expert. There are certain symbols that are used in mechanical drawings, and a mechanical engineer is, I submit, your Honor, wholly qualified.

The Court: Well, Mr. Byron, do you want that answer or not?

Mr. Byron: I want it out. He didn't answer the question. It wasn't responsive.

The Court: That is true. Look at the question, Mr. Maguire.

Mr. Cunningham: The one on 124, your Honor?

Mr. Lucas: We haven't come to that yet.

The Court: The first one certainly wasn't responsive [581] that I struck.

Mr. Byron: The second one is just as faulty.

Mr. Maguire: Is that page 121, your Honor?

The Court: Mr. Byron, do you agree that an engineer may, by looking at a description, determine whether the word "fin" is necessary or not necessary in order to characterize the drawing?

Mr. Byron: An engineer is no different from any person who can read English. The point we are bringing out is that there is not word mentioned about——

The Court: I don't want any argument here.

Mr. Byron: Oh, no.

(Deposition of Ferdinand J. Bommer.)

The Court: Yes.

Mr. Byron: Now, what one man may say about a drawing—he may interpret it one way; another man would interpret it another way, and so I can't say——

The Court: I thought it was the function of the Court to determine the interpretation which may be placed upon a drawing. I didn't think that a man who is an engineer is capable of placing a construction on that. I appreciate the fact that that might be something for Mr. Parker to testify on, who is going to come forth as your expert, but I doubt whether Mr. Bommer has the qualifications to read a patent.

Mr. Byron: The main point is, the answer is not responsive to the question asked, and I move to strike the answer as [582] not responsive.

The Court: Which one is that?

Mr. Byron: Well, there are two of them; the last one that was read——

The Court: On what page?

Mr. Lucas: 121, your Honor.

The Court: The question is stricken on the ground that it is not responsive.

Mr. Byron: The answer is.

The Court: The answer is stricken on the ground it is not responsive.

Mr. Byron: Now, may we proceed?

The Court: Yes.

Mr. Byron: All right.

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: The answer is stricken on what page?

The Court: On page 121.

Mr. Cuningham: That's all right.

The Court: It begins with line 11, "As a refrigerating engineer"—the entire answer is stricken on the grounds it is not responsive, among other grounds.

Mr. Cuningham: Is the question likewise stricken?

Mr. Byron: No. Why should it be?

The Court: No, the question is not stricken.

Mr. Lucas: There is also a question and answer on 120.

The Court: I have already ruled on that, Mr. Lucas. [583]

Mr. Maguire: I understood your Honor struck the question—or the answer on 120.

The Court: Yes.

Mr. Maguire: Very well.

The Court: If you think you need an exception you can have exceptions to all this.

Mr. Maguire: Well, I understood that those exceptions are as a matter of law——

The Court: Automatic.

Mr. Maguire: ——automatic.

The Court: But some lawyers keep asking me to preserve their record and make an exception. I appreciate your understanding of the law; it agrees with mine.

(Deposition of Ferdinand J. Bommer.)

Mr. Cuningham: I have no desire to read that on 124, your Honor.

The Court: Where are we now?

The Crier: I am on 124, about one-third of the way down.

Mr. Cuningham: The statement that Mr. Berner made, which I think we should have left out, mere colloquy, not proof, on 124, your Honor——

Mr. Byron: Now, of course, it's nice to have him——

The Court: Wait a minute. We are going to all get along pretty well.

It's now 20 minutes of eleven, and I think it's a good time to take a recess. [584]

(Whereupon, the jury was excused for their midmorning recess, and the following proceedings were had out of the presence of the jury.)

The Court: I don't find that colloquy on 124, Mr. Cunningham.

Mr. Cuningham: About five lines or six lines down starts "Mr. Berner."

The Court: "The only question, as I understand it, Mr. Byron wants to know whether the word 'fin' appears, 'f-i-n.'" Well——

Mr. Byron: That's right. Let it stay in; instructing his witness to answer. It's at least explaining to his witness that I want an answer with respect to that particular point.

The Court: So we have left out other colloquys.

Mr. Byron. Let's have the answer, "It's obvious the word 'fin' is not in this description."

Mr. Byron: Very well. I want that read to the jury.

The Court: No, I would like to find out now because we may get into this same difficulty again, whether I am correct in stating that one who is not qualified as a patent expert may tell the reach of a diagram or a description and construe a patent.

Mr. Cuningham: Your Honor knows, I think, that both parties indicated they would have—of Mr. Parker, your [585] Honor, in our case; however, there are such things as—I call them fact experts. Of course, I think Mr. Bommer, who is one of the most highly-qualified refrigeration engineers in the country, is certainly capable to interpret this drawing and would be of a great assistance to your Honor. I think your Honor is correct, of course, as to the interpretation of drawings or ultimately—are ultimately for the Court, but I do think you want the assistance of qualified men who, a man who spent his life in refrigeration reading patents and drawings and things like that. [586]

The Court: Do you join with Mr. Cuningham, Mr. Kolisch?

Mr. Kolisch: No; not at all. No one except a patent expert could testify to a patent drawing. A patent drawing is not a mechanical drawing; it is a patent drawing. It is tied to the specification, and it is tied to the claims, and it is only someone qualified in that who can offer some assistance to the Court, if the Court wants it.

(Deposition of Ferdinand J. Bommer.)

The Court: I was under the impression that the purpose of a patent drawing and the specifications is to clearly and definitely state the patent so that anyone skilled in the art can reproduce it.

Now, under those circumstances, may not a man with Mr. Bommer's qualifications testify as to whether he could manufacture such a refrigerator from looking at the specifications, and if that is true can he not testify that from looking at the coil Fig. 25, he came to the conclusion that this is a finned coil and that a person versed in the industry would naturally assume that this was a fin coil? Is that an improper statement on his part?

Mr. Cuningham: Your Honor, it is so much better, and I agree with it, and I could not agree with it more fully.

The Court: Mr. Cuningham, I suggested earlier today that if you would not put everything on the same level, and if I know which you are really interested in getting I would know which statements of yours to place credence [587] in.

I think that I struck the answer properly because, as you pointed out, Mr. Byron, it was not responsive to the question, but this issue may rise again, and I want to know whether the statement I made with which Mr. Cuningham agrees is or is not correct.

Mr. Byron: I will just say this, that the statement of the witness is one man's interpretation of some lines up there.

The Court: I know that, Mr. Byron. That is the function of an expert, to render an opinion. He is the only type of witness that may give his conclusion, but if my statement is corect, then a witness may set forth his conclusion just as your experts are going to be permitted to give their conclusion. The specific question that I want to propound is: Do you contend that only a person who is a patent expert may state his conclusion to the jury?

Mr. Byron: No, I do not.

The Court: Or may a refrigeration expert likewise——

Mr. Byron: I think it is more properly that, but I have no objection to the witness stating that, in his opinion, the lines which are shown there indicate to him a tin.

The Court: That is what he did, and if the question [588] was asked him and if it was responsive, if his answer was responsive, then in your opinion the answer would be proper?

Mr. Byron: No, because it was not responsive.

The Court: Assuming responsiveness.

Mr. Byron: Well, assuming, why, all right. That is one man's interpretation, but the point is, if I had asked for a conclusion.

The Court: From now on I will rule that a refrigeration expert may state his conclusion, his personal opinion, as to what a drawing represents.

Mr. Byron: Very well.

The Court: Under these circumstances, would you have any objection if I would notify the jury

that it is Mr. Bommer's opinion that Figure 25 represents a finned coil?

Mr. Cuningham: I certainly have no objection, your Honor. I think it might be a little safer to read the answer which he has given.

The Court: The difficulty is that Mr. Berner was not a very expert trial counsel, and he asked a lot of questions that he should not have asked, and he did not instruct his witness properly.

Mr. Byron: Well, on the other hand, he regards himself as one of the world's best, and he is a very capable trial lawyer. He has a tremendous practice in New York; [589] am I right?

Mr. Cuningham: I do not know, sir.

Mr. Byron: Well, he tells me——

Mr. Cuningham: I think he is very highly regarded in New York. I think that is not Mr. Berner's question. Really, I think we want the words from the witness. It is a little safer; that is all. I am referring to the answer on Page 120 and also to the answer on 121.

Mr. Byron: Your Honor, the only thing I am driving at, and it will come out here later, that there is not a single word in the specification about fins.

Mr. Cuningham: There is no dispute about that.

Mr. Byron: That is what I am driving at, but this witness just simply would not say so in spite of the fact that he read. He was just belligerent.

Mr. Cuningham: I do not think—I said there was no dispute in my mind that the word "fin" is

not in the specification. I think it is very clearly implied from the words of this specification of its being a finned coil.

The Court: The ruling as to the answer appearing on Page 120 will not be changed, and that answer goes out.

I had hoped that we could eliminate some of this. Mr. Byron, did you not call my attention to a great deal of testimony concerning the difference between a covered dish and one that was uncovered? I do not see the relevancy of [590] that testimony.

Mr. Cuningham: May I point it out to your Honor?

The Court: Proceed.

Mr. Cuningham: It shows that the great research laboratories of the Frigidaire Corporation were trying to solve this problem of dehydration and could produce nothing better than a covered dish, and contrast that with the fundamental basic solution produced by the patent in suit, and we are arguing, sir, that that is a demonstration that was beyond ordinary skill when the biggest research department in the country produces a covered dish at the time these inventors produce a fundamental solution.

The Court: Did the commercial refrigeration have the same types of moist cold in their cooling chambers?

Mr. Cuningham: Oh, no, sir.

Mr. Byron: Now, let me say something.

Mr. Quinn, whose deposition was taken by plaintiff and who was the Vice-President of the General

Electric Corporation, said that they did not want to get into this moist cold feature, as Potter has had at that time at least, because it would add greatly to the expense of refrigerators, and General Electric and the rest of them were in a battle trying to bring down the price, and that is what the testimony is, and so they took a simpler way of putting in a covered dish or hydrator, and that is their witness. [591]

Mr. Cuningham: His deposition will be next, sir.

The Court: I think we are getting some place now. Ever since I read Mr. Maguire's statement, I know generally or with greater specificity what the plaintiff claims is the invention. This moist cold is one of the essential elements, as I understand it. We will take a recess for about five minutes.

(Recess taken.)

(Thereupon, the jury returned to the jury box and the following proceedings were had in their presence.)

The Court: Ladies and gentlemen of the jury, a few minutes ago I announced that, in my view, no one but a person who is qualified as a patent expert could explain the meaning of a drawing or specifications. Upon reconsideration, I have come to the conclusion that a refrigeration expert can also express his personal opinion.

That is the function of an expert, to express an opinion, and that is what makes him different than the ordinary lay witness. A lay witness or one who

is not skilled in the art may only testify as to facts, but when he has been qualified by education and training as an engineer or as a physician or as a patent expert he may express his opinion based upon a certain question. [592]

I ruled out an answer, and that answer was properly ruled out because it was not responsive. Witnesses cannot answer any question other than the question that is propounded to them, and if the question is not responsive they may not answer the question, but from now in you will hear many witnesses testify as to their opinion, and you may consider that along with the other testimony, but before a witness may express his opinion, of course, he will have to be qualified as an expert.

If a man is an expert physician, he may not be qualified to express an opinion as to a mechanical subject. In this particular case we are going to have two types of experts, I understand, refrigeration experts and patent experts, and the value of testimony or an opinion is dependent upon many factors. You judge an expert witness just the same way as you judge a lay witness, but you must also consider his training, and you must also consider reasons which he gives in support of his conclusion.

I am going to tell you this over again during the instructions, but I thought that this was a propitious time to let you know which of the witnesses are permitted to express their opinions.

Proceed.

Mr. Lucas: 129, Line 9. [593]

DEPOSITION OF FERDINAND J. BOMMER
Cross-Examination
(Continued)

The Crier: You want just the answer on that, I understand. "A. It's obvious the word 'fin' is not in this description.

Q. Now, your assumption is, however, that where there is a cooling coil in a cooling compartment such as 14, if you call for a coil, that necessarily means that there are fins on it? Is that what you are saying about that patent?

A. No. I am saying, about that, I am simply saying that it definitely shows fins and so designated by the number 25.

Q. Well, you said something——

A. (Interrupting): Is there an error in the patent?

Q. No. A. Art? Error?

Q. Look: I am not the witness. You are the witness. Now I want to ask you another question. I said any refrigerating engineer—I'll ask you—did you say that any refrigerating engineer would know that a coil in a cooling compartment such as 14 in the patent in suit would need fins?

A. I would say that, as indicated on the drawing on that patent, a refrigerating engineer would know that it was a finned coil.

Q. Well, now, what appears there in Fig. 2 of the drawings [594] is just an oblong outline, isn't it? 25? A. Yes, sir.

Q. You wouldn't know. It might be a box, might

(Deposition of Ferdinand J. Bommer.)

it not?

A. I would say that this, as drawn, is an engineer's designation of a finned coil. Would that answer your question?

Q. That's your answer?

A. Yes, sir. That's my answer to your question.

Q. But it might represent a brine box, too, might it not?

A. Not to a refrigerating engineer."

Mr. Cuningham: I have no desire to read it, sir. It is a copy, I think, of the patent.

The Court: Where are we now?

Mr. Lucas: 126, your Honor, about Line 8 or 9.

The Court: Is it Mr. Berner?

Mr. Cuningham: I would be glad to put it in. I simply wanted to say—— [595]

Mr. Cuningham: Well, I would be glad to put it in. I simply wanted to save duplication.

The Court: All right. Go ahead and read your next question that you want in.

Mr. Lucas: "Q. Well, would a refrigeration engineer, having a coil in a cooling compartment ranging from 40 to 45 degrees temperature, know that there should or should not be fins on that coil?"

Mr. Cuningham: You have the answer there.

The Court: Where is the answer to that?

Mr. Cuningham: Right below.

Mr. Lucas: After the colloquy, yes.

(Deposition of Ferdinand J. Bommer.)

The Court: Read that, "Would he know it? Yes."

Mr. Byron: 127, middle of the page.

Mr. Cuningham: 127 is the question.

Mr. Byron: It's repetitious.

The Court: Where are we now?

Mr. Byron: Middle of page 127 is the answer.

Mr. Lucas: "Q. A refrigeration engineer, having a cooling coil in a cooling compartment, at the desired temperature range between 40 and 45 degrees, would that engineer know that he should have fins on that coil?"

The Court: All right, read the answer.

The Crier: "A. If the allotted space for the cooling mechanism was indicated as a small proportion of the cooling [596] chamber, he would, a refrigerating engineer would know that the cooling coil in that container, in order to properly cool the compartment, it would all depend on the relation between the size of the coil and the amount of space to be cooled.

Q. You had no difficulty in understanding the patent office drawing in that suit, did you?

A. No, sir.

Q. Now, just along this same line of analysis, I want to have you point out a few elements in the Anderson Patent No. 1,439,051"——

Mr. Byron: Now, your Honor, may we fix this other chart up so that I may point to elements on it?

(Deposition of Ferdinand J. Bommer.)

The Court: All right.

What is the matter now?

Mr. Ramsey: The Anderson patent is identified as Defendants' 105, and we now offer it.

The Court: You mean the——

Mr. Byron: Anderson patent.

The Court: The entire Anderson patent?

Mr. Byron: Yes.

The Court: All right.

Mr. Byron: What is the exhibit number?

Mr. Ramsey: 105.

The Court: Is there any objection to the admission of 105? [597]

Mr. Cuningham: No objection.

The Court: It may be admitted. I think that was one of the references in the answer, anyway.

(Whereupon, the document, being Anderson Patent No. 1,439,051, was received in evidence as Defendants' Exhibit 105.)

Mr. Lucas: ——"and I will ask you first, if that is a household refrigerator having a cabinet 9?"

Mr. Maguire: What page is that?

The Court: The middle of 128.

Mr. Lucas: ——"You will find 9 over at the right-hand corner of the drawing.

A. Yes, I see that.

Q. That's correct, isn't it?

A. That's right. Now one question, let's get

cleared up, first. The Anderson patent does not refer to a household electric refrigerator. It refers to 'a refrigerator.'

Mr. Berner: A refrigerator apparatus.

A. All right. So marked at the top.

Q. Now, then, referring to this same Anderson patent, the cabinet 9 has a cooling compartment 6, has it not? That's the upper compartment.

A. Yes.

Q. And it has a freezing compartment 7, has it not? A. Right. [598]

Q. And it has thermal insulation 10, 11, 14, has it not. That thermal insulation being around the side of the box, in the back of the box, and the top of the box, and between the cooling compartment 6 and the freezing compartment 7, and between those two compartments and the compartment containing the apparatus, namely, the compartment 8. That's correct, is it?

A. There is air in compartment 6, of course? Yes.

Q. That's where the food is normally placed, that is, the food that's not frozen. Correct?

A. Yes.

Q. And there is air in the freezing compartment 7 in Anderson. Is that correct? A. Yes, sir.

Q. Now, that Anderson patent shows a cooling refrigerant coil, or expander 40, does it not, in the upper compartment 6? A. Yes.

Q. And it shows, Anderson shows, a freezing refrigerant expander 35 in the freezing compartment 7, does it not? A. That's right.

(Deposition of Ferdinand J. Bommer.)

Q. And a volatile refrigerant passes through those expanders, does it not? A. That's right.

Q. And that volatile refrigerant passes through the compressor unit through a pipe 32? [599]

A. Yes.

Q. Through a reducing valve 35? A. 33.

Q. 33, correct. That's the same expansion valve, isn't that? A. Yes.

Q. And then that refrigerant passes through the freezing coil 34. Correct?

A. That's right; yes, sir.

Q. And then passes up into the coil 40 in the warmer compartment 6. Correct? A. Yes, sir.

Q. And then passes, returns to the compressor unit. Correct? A. Yes.

Q. And that's a single refrigerant all the way through? A. Yes, sir.

Q. Now, then, I'll ask you to refer to page 1 of that patent, and beginning at line 91—that's in the second column—find 91, and I'll read to you:

> 'Suitable automatic controlling mechanism as exemplified by a thermostat in the refrigerating chamber * * *'

That refers to a thermostat in the chamber 6, does it not? A. Yes, sir.

Q. And that, of course, is for controlling the operation of the motor-compressor-condenser unit. You will notice that [600] refrigerating chamber 6 is indicated, or shown, described at page 1, column 1, line 41. I say, it does refer to a thermostat for

(Deposition of Ferdinand J. Bommer.)

that chamber, refrigerating chamber 6? That upper chamber? A. All right. All right.

Q. That's correct? A. All right. Okay.

Q. The cooling coil 40 in the chamber 6, which is the warmer of those two chambers, is made of a round pipe, is it not?

A. Yes, sir. Let's say that it shows a round pipe. Illustrates a round pipe.

Q. Yes. Yes. That's all right. That's what I say. What difference, if any, would it make in the operation of this Anderson apparatus with those cooling coils 40 bearing against the metallic side walls 12?

A. Well, unless they were bonded directly to the metal, that effect on the side walls would be little. There are a lot of elements in consideration there. What are the side walls? If they are porcelain enamel walls, the conduction would be very little. Would depend upon how tight they were or, let's say, how close the proximity of the coils was to the walls.

Q. Well, say if they are actually in engagement, what would be the effect?

A. They would have some degree of finned action. [601]

Q. Yes. I might have you refer to page 1, col. 1, beginning in line 50:

> "The side and top walls of the refrigeration chamber, partitions 1 and 11, and the outer side and bottom of chamber 7, each comprise a metal inner lining 12 * * *"

(Deposition of Ferdinand J. Bommer.)

I just want to mention the fact to have you know that those walls, side walls, are metal.

A. It would depend upon what the metal was, how that was treated. I said, if it was porcelain enamel it would be practically no effect.

Q. Doesn't show it's porcelain?

A. It doesn't say that it isn't, either.

Q. Says 'A metallic wall,' doesn't it? A metallic lining or inner wall has power of absorbing heat, hasn't it? A. If it's bonded to the coil, yes.

Q. And to some degree if it is only engaging the coil?

A. Very little. I think the space of one thousandth of an inch decreases the effect tremendously.

Q. The expansion or reduction valve 33 in the Anderson patent is for regulating the degree of pressure in the freezing coil 34, and, therefore, the degree of pressure in the freezing coil 34, and, therefore, the degree of supply of liquid refrigerant to the coil 34. Is that not so?

A. I would want to read this Anderson patent again. It's [602] many years since I saw this Anderson patent and it isn't fair to give answers.

Q. I'll give you the part.

Mr. Berner: Let him read it if he wishes.

Mr. Byron: Sure. I want to show him at the same time.

Page 2, Col. 1, if you like, but if you would like

(Deposition of Ferdinand J. Bommer.)

to read the whole thing, I would be pleased to have you read it.

A. (Reading from document): That is correct.

Q. If the coils 40 in compartment 6, which is the warmer compartment of the two, should drip water, that would indicate that the temperature of the outside surface of the coil would be above 32 degrees, would it not? A. During defrosting, yes.

Q. Well, at any time?

A. Not necessarily, no.

Q. Well, any time they are dripping, that would mean that the coils were above 32? A. Yes.

Mr. Berner: You are assuming they are dripping, but there is no showing that they ever dripped.

Mr. Byron: He read the specifications.

Q. When the coils 40 in the warmer of the two compartments—chambers—6, when the coils are dripping, that would indicate that the outside surfaces of the coils were above 32 degrees Fahrenheit, would it not? [603] A. Yes, sir.

Mr. Byron: Cross-examination closed."

The Court: Mr. Maguire, are you going to read the questions?

Mr. Maguire: I could, your Honor. I think the next page on redirect is on page 134. Am I correct in that?

Mr. Lucas: Yes, sir.

Mr. Maguire: Yes.

(Deposition of Ferdinand J. Bommer.)

"Redirect Examination

By Mr. Berner:

Q. Well, did the Anderson patent provide for air-conditioned or above-temperature freezing, as you examine it?

A. Above-temperature freezing?

Q. I mean above freezing temperature conditioning, such as the Potter. A. No.

Q. In the upper compartment?

A. No, there are no claims to that effect. There is no description to that effect.

Q. In your opinion, from examining it, the diagram and specifications, would it give air-conditioned cooling? A. No.

Q. In the upper compartment?

A. No. [604]

Q. Would the Potter? A. Yes.

Q. Does the Anderson patent show any finned coil or other surface for diluting heat conduction?

A. No.

Q. Now, as I understood your testimony on cross, you stated that the fins had been used in the automotive field earlier than in the refrigeration field. Is that right? A. That's correct.

Q. Now, as Potter applied principles of fins in the construction, will you explain the difference from the automobile use of fins in automobile radiators?

(Deposition of Ferdinand J. Bommer.)

A. Well, the action of the fin is actually reversed in the automobile. You have a hot tube, or a hot honeycomb jacket, whatever you want to call it, that you wish to cool the liquid in the tube so that you dispel the heat through fins, which is an expelling action. In a refrigerator you have cold liquid in the tubes surrounded by a warmer ambient, and it is an absorbing action of the fin.

Q. Now, prior to Potter, did you ever know anybody who used that technique in refrigeration?

A. That was the question which came up this morning that I said, as my memory, that was overlapped. It was the first time I saw it used in a household refrigerator or a domestic electric refrigerator. [605]

Q. Now, then, in response to a question of Mr. Byron's, you said that any time an engineer wanted to get a forty-five-degree temperature he would use a finning. Is that what you said?

A. That isn't what I mean to imply; no, sir.

Mr. Byron: I didn't put it that way. I put it in a compartment.

Q. Well, in a compartment. Did they know how to do that around 1931 in a domestic refrigerator, so far as you know?

A. It was never done. I am taking it now you are saying around 1931?

Q. Yes. Now when you testified that was what an engineer would do, would that be the present practice, today?

(Deposition of Ferdinand J. Bommer.)

A. I said that, giving a confined area or amount of room to install a cooling unit in a compartment, if the amount of room was confined, you would have to fin the area in order to get enough refrigerating surface to accomplish the purpose.

Mr. Byron: And any engineer would know that.

Mr. Berner: Wait awhile.

Mr. Byron: And any engineer would know that.

Q. Now, and as Mr. Byron said, you also said that any engineer would know that?

Mr. Byron: Refrigerant engineer.

Q. Refrigerating engineer would know that? As of the present time, that they would know it? [606]

A. Yes.

Q. Did they always know that?

A. No, sir.

Q. Was it known in terms of domestic refrigerators prior to the Potter development?

A. No.

Q. Now, with reference to the Anderson Patent No. 1,430,951, does the refrigerating apparatus shown there have to be defrosted?

A. As shown, yes.

Mr. Byron: I object to that as a conclusion. You have no way of knowing that.

Q. And does the box, as shown, have the advantage of the Potter-type refrigerator that you have testified to? A. No.

Q. Now, have you ever seen reissue patent number——

(Deposition of Ferdinand J. Bommer.)

Mr. Byron (Interrupting): I object to that, first, as a conclusion.

Q. Have you ever seen reissue patent No. 23,058, dated December 14, 1948, before today?

A. No, sir.

Q. Now, you testified on cross-examination, did you not, there were four to six lines going at Rex at one time. Will you explain that, if you will?

A. Yes, sir. The Rex factory was a three-story factory. [607] Those production lines——

Mr. Byron (Interrupting): That's objected to as immaterial and irrelevant."

The Court: Well, that was out.

The Crier: "A. (Continued): ——were set up and dismantled to meet the requirements of changing production schedules. On the back of the third floor they had a line on which Potter and Stewart-Warner cabinets were run at all times. The delay in producing Potter cabinets was due to the constant use of the lines for Stewart-Warner production, or until such time as the Stewart-Warner production had been completed.

The Witness: I saw it. It isn't hearsay. I was there."

Mr. Maguire: I think the statement of the witness made at page—top of page 139 should come out because the objection was taken out.

Mr. Byron: Satisfactory.

The Court: I think you can start in at 140. Is that right?

(Deposition of Ferdinand J. Bommer.)

Mr. Maguire: No. There is another question and answer, your Honor.

"The Witness: I'll amend my answer to say that I was there at least two days a week."

The Crier: "The Witness: I'll amend my answer to say that I was there at least two days a week.

Q. Was that expensive? [608]

A. Wait a minute. I was there for two days a week for many months at a time during the peak refrigerator season, and that during these times it was the rule that the only time Potter cabinets were run was after the Stewart-Warner production was complete."

Mr. Maguire: Now, I take it that we go to the top of page 140.

"Q. Now, with reference to the hydrator pan, can you tell us whether that was good or bad for the food from the point of spoilage?

A. From the point of spoilage, why it was bad.

Q. Will you explain your answer?

A. All hydrator pans were covered. Otherwise they would not have been hydrator pans. The amount of air in the hydrator pan was very limited and food deteriorated from its own foul air in such confined areas.

Q. Would it be fair to say that though they might have had a beneficial effect, that the hydrator pans, from the point of view of preventing dehydration, that it created the evil you just described?

A. That is correct. It helped the dehydrating

(Deposition of Ferdinand J. Bommer.)

condition and increased the deterioration condition.

Q. Was this true of the Potter air-conditioned compartment?

A. That was not true of the Potter.

Q. Now, did you examine the Potter box when you were at [609] Jewett? A. I did.

Q. And were you preparing a production model, or production drawings for it? A. Yes, sir.

Q. And did you make all the examinations of the Potter box that were required for that?

A. Well, entirely dismantled the Potter sample and rebuilt it.

Q. Then would you say that you made a detailed examination of the Potter box?

A. Very thorough detail.

Q. At Jewett?

A. (Continuing): Examination.

Q. And when you referred to the fact on your cross-examination that you didn't know whether the compressor unit was in it, were you referring to the recollection of it rather than to your failure to examine the box carefully?

A. It was a matter of recollection.

Q. Now, could you tell us, in your recollection, what you were sure the box contained when you saw it?

A. The box contained a complete cabinet.

Q. When it first entered Jewett? There was a motor that came from the West Coast to Jewett?

A. Yes. A complete cabinet. A complete tubing

(Deposition of Ferdinand J. Bommer.)

extending [610] down into the machine compartment, and expansion valve, a freezer plate, and in the frozen storage compartment, the tube being connected from the freezer plate to the fin coil in the upper compartment, the tubing from the finned coil in the upper compartment back to and extending into the machine compartment. Also a thermostat which was completely wired with extensions to the machine compartment.

Q. Now, referring to the commercial refrigeration refrigerators that Mr. Byron talked about, would you describe the system of the commercial refrigerator as it existed prior to Potter in 1931—'30 and '31?

A. Prior to 1930 and '31, the commercial refrigerator? The cooling of refrigerators commercially was done by cooling a series of coils in a refrigerated bath. In this bath were submerged pipes containing a brine solution and the brine solution was pumped to each individual refrigerator or section of a refrigerator. The amount of refrigerating coil which cooled the refrigerators was made proportionate to the temperature to be accomplished in each compartment and regulated by separate intake and outgo hand valves which had to be manually operated. There was no connection between the coil pipes in one compartment to another compartment in the same refrigerator.

Q. And what refrigerant was used?

A. In the commercial jobs there was, a majority

(Deposition of Ferdinand J. Bommer.)

of them at [611] that time, were ammonia systems. There was some sulphur dioxide systems but the majority of them were ammonia systems.

Q. And so far as you can recall, did any of them have any finned coils prior to 1931?

A. They did not.

Q. And was there any provision for air-conditioned cooling which would also prevent dehydration? A. There was not.

Q. Well, can you describe what happened with respect to dehydration even in the portions reserved for salads and lettuce of the commercial boxes?

A. Well, in the refrigerator it must be regarded that in a refrigerator where you refer to salads, such salads, in commercial applications, were put into those refrigerators for very short duration of time. For instance, in a banquet hall, the salads will probably be made at 3:00 o'clock in the afternoon to be served at a banquet at 7:00 o'clock so that it was more a method of keeping them in a chilled condition just so they wouldn't warm up to room temperature. Was a matter of hours.

Q. So that the requirements were different than for domestic? A. Entirely different.

Q. And the job they did was also different?

The Potter refrigerator, for example, was the job the commercial refrigerator did different?

A. The Potter and the commercial refrigerator differed widely. [612]

(Deposition of Ferdinand J. Bommer.)

Q. Will you describe the changes or the advantages of the Potter over the commercial refrigerators in terms of defrosting and dehydration of foods, assuming it was kept for the same period?

A. Household? The normal household?

Q. No. I am talking now about commercial refrigerators. What could they do, if given the job of doing the Potter?

A. To the best of my knowledge, the words 'air-conditioned compartment' or 'moist cold compartment' in any refrigerator were not mentioned until we heard of T. Irving Potter.

Q. That also includes the big, commercial boxes?

A. That also includes the big, commercial boxes.

Q. What was the size ranges of these big, commercial boxes? A. That's hard to say.

Q. What do they range?

A. Some of them might have been no larger than a household refrigerator, depending on the application.

Q. How big did they get? To what size?

A. I built commercial refrigerators, 80 by 150 feet, that had as many as five rooms in them.

Q. And did any of those refrigerators have any moist, cold compartments prior to the Potter?

A. No, no.

Q. Now, can you tell us whether prior to Potter there was any refrigerator, commercial, domestic or otherwise, that had [613] all the advantages of the Potter refrigerator that you know of?

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: I object to that; calling for a conclusion.

A. Not to my knowledge.

Q. Well, will you tell us of any refrigerator which had the advantages of the Potter?

A. I don't know of any.

Q. Prior to '31 and '32?

A. Yes. I am talking from the time, the date I met Mr. Potter.

Q. And since 1940, have a great many refrigerators been built which have the three advantages you mentioned of the Potter: (1) air-conditioning; (2) separate compartments for frozen foods and moist, cold; and (3) not requiring defrosting?

A. There are; a lot of them.

Q. Would you say they were comparable to the Potter refrigerators that you were building in the early 1930's? A. I would.

Q. In those respects. Now, Mr. Byron asked you about whether you had, you and Jewett, had faith in the Potter refrigerator. Can you answer whether or not you did have, or did not have, faith in it?

Q. Well, did you have faith in the Potter refrigerator and the Potter principles?

A. I would say that we very evidently had faith in them. As I have started before, we made a very thorough investigation of what Mr. Potter had to offer. We made a thorough checkup [614] to see

(Deposition of Ferdinand J. Bommer.)

that his refrigerator would perform as he claimed it would perform.

Q. What did you find?

A. And if it had not been satisfactory, a staid old company like the Jewett Refrigerator Company would have dropped it right then and there.

Q. Did you drop it?

A. We did not drop it. As I told you, we went out and did a lot of engineering and brought the engineering up to date and produced a quantity of models from the revised engineering plans.

Q. Were you and Jewett satisfied with the models you provided that the Potter refrigerator could do a triple job of providing a moist, cold, deep freezing and no defrosting?

A. We were.

Q. And did you envision, did Jewett envision, a small production of Potter, or a large number? What kind of production was envisioned?

A. No.

Q. What kind of production was envisioned?

A. I don't remember. It was sizeable production. It was production, let's say, that the Jewett Company would have been interested in, in performing, in getting out.

Q. And could that have required a considerable sum of money? A. It always does. [615]

Q. When you are dealing with large production?

A. Yes.

Q. Now, referring to Plaintiff's Exhibit—referring to Plaintiff's Exhibit No. 37, and specifically

(Deposition of Ferdinand J. Bommer.)

to Mr. Byron's question about how you knew about this ad of February 24, 1932, of Potter's"——

Mr. Maguire: I think in this case that exhibit is now 3-U.

"——can you tell us what the effect of this ad was in the refrigerator industry as far as you know?

A. Well, within the refrigeration trade, it was astounding, because never before had anybody even approached such a publicity and advertising setup in a trade magazine. This was the largest publicity —I was going to say stunt, but that isn't the word— it was the largest piece of publicity that was ever offered to the trade paper, or let's say, shown to the trade, to that time.

Q. And did this go to technical people who were well-acquainted with the refrigeration industry or did it go to the general public?

A. That is the technical newspaper of the refrigeration industry.

Q. And would you describe what improvements were offered by Potter that were then not known? To the refrigeration industry.

Mr. Byron: The patent speaks for itself. The prior art. [616]

A. I would say that, in the ads, they talked for themselves. They offered balanced humidity and sub-zero freezing and quick cooling frozen storage. It offered a new line of housekeeping to which nobody had an answer to before.

(Deposition of Ferdinand J. Bommer.)

Q. Did this attract much attention in the industry? A. Yes, sir.

Q. And in your opinion did it come to the attention of practically everybody in the industry so far as you had any contact with them?

A. I would say very definitely.

Q. Both the ads and the results claimed by the Potter Company for the refrigerator?

A. Yes.

Mr. Berner: That's all."

"Recross-Examination

By Mr. Byron:

Q. In 1944, when you gave your deposition in the case of Refrigeration Patents Corporation against Stewart-Warner Corporation, in the record at page 714, you were asked this question:

'Q. To go back a moment, Mr. Bommer, prior to the time you saw the sample box which Mr. Potter submitted to the Jewett Company, had you ever seen a fin coil used for the purpose of cooling [617] the chamber of an electric refrigerator?

A. I would say yes.

Q. Under what circumstances?

A. It is my impression that there were types of fin coil units used for cooling refrigerated compartments in commercial refrigerators.'

You disown that testimony now?

Mr. Berner: I object to the form of the question. What do you mean 'disown'?

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: Today he testified differently. He said he had never seen a coil.

Mr. Berner: If you want to ask him what his testimony is, I object to the word.

Q. You are now changing your testimony, are you?

Mr. Berner: I object to the characterization 'changes.' It is improper and I object.

Q. You testified today that you never did see a finned coil used for the purpose of cooling the chamber of an electric refrigerator, that is, prior to Potter?

A. My testimony today was to the effect that I had not seen a finned coil used to cool an electrical household refrigerator. I think if we go back to the notes we will find that I qualified my answer.

Q. But you did see it on a commercial refrigerator?

A. I told you also, very definitely, that to me that's [618] twenty years away, there is a question in my mind as to what time limit there was, whether it was just before, just after, or at what stage.

Q. When you gave this testimony in '44, the Stewart-Warner case, that was only eleven years away and that, at that time, you said:

'It is my impression that there were types of fin coil units used for cooling refrigerated compartments in commercial refrigerators.'

Mr. Berner: Then read the next question and answer to him, too. The next question and answer.

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: All right.

'Had you ever seen a fin coil used for cooling purposes in a domestic refrigerator?'

We will come to that.

'A. It's a long time to ask a man to remember back in detail thirteen years ago, but I do not think it is.'

That's with domestic, but this other is with respect to commercial.

Mr. Berner: And then he goes on to talk about the use of finned coils on the condensers in refrigerating units; which is another matter.

A. I told you this morning—I understand that—this morning when we talked about that, I tried to make it quite [619] clear that when it comes to the actual date on the fin coil, or my seeing a fin coil in relation to the date that T. Irving Potter walked in my office, it is my memory, just as I said at that testimony in 1944, and again I tell you today, and as I said, today. [620]

Q. But you were definite in 1944 with respect to commercial refrigerators. A. I said——

Mr. Berner (Interrupting): He said, 'my impression.'

A. (Continuing): I didn't testify that they did.

Mr. Berner: He testified to what he testified.

Q. Well, you said it was your impression that there were types of fin coils, coil units, used for cooling refrigerator compartments in commercial refrigerators.

(Deposition of Ferdinand J. Bommer.)

Mr. Berner: There's no conflict in there. I don't see where there's any conflict.

Q. Now, you say you don't remember that there was, on commercial machines?

A. I think that you will understand this, that in my testimony, today, is at least—I tried to give the idea, or the same position, that that lapse in there, I don't know.

Q. In other words, you are indefinite; that's all there is to it. If you don't want to live up to it, okeh, change it.

A. It isn't a matter of living up to it. That was my impression at that time. It was a correct statement, that I had seen them.

Q. Well, then, your memory served you better in 1944 than it would in 1955 with respect to that detail, would it not?

A. I don't know as it would. Maybe it would. Seems to [621] me we are getting off base here.

Q. Well, now, I would like to have you compare the original Bronaugh Patent 2,056,165, and the Bronaugh Reissue Patent 23058, which is a reissue of that original, and ask what differences there are. You said that you had never seen the reissue patent before. It's identical with the other, is it not?

Mr. Berner: Are you referring only to the diagram?

Mr. Byron: I was referring to the entire reissue. Everything except the claims. Has to be the same.

Mr. Berner: I was referring to the physical document dated December 14, 1948, not the fact there was a comparison.

(Deposition of Ferdinand J. Bommer.)

Mr. Byron: I just want to know if that is not the same disclosure.

Mr. Berner: That's all right. You mean any one of the diagrams are the same? If you want to go into the claims separately, if you wish, because there is a difference, as you know.

Q. There is no difference in the drawings of the original and the reissue patent of this Bronaugh & Potter, is there?

A. Are you asking me or telling me there is?

Q. Yes. There is none, is there? There is no difference?

A. I don't know, without examination.

Q. Look at them well. Examine them.

A. I will state, from a legal standpoint, that is correct. [622] Apparently there is no difference.

Mr. Berner: I accept Mr. Byron's statement with reference to the diagram as correct.

Q. Now in these commercial refrigerators which you referred to as having two independent coils, one for the freezing compartment and one for the warmer compartment, your position is that it's entirely different from what the patent in suit is for? There they have the single two pipes in series.

A. Well, the entire refrigerating system is different.

Q. Well, including the difference that you refered to, is that in the patent in suit, the two coils, one in the freezing compartment and the other in the warmer compartment are in series and it's one continuous coil? That is correct, is it?

(Depcsition of Ferdinand J. Bommer.)

A. That's correct.

Q. Yes. And then in this commercial-type machine you make the distinction by saying that the coil in the freezing compartment is a different coil from that in the warmer compartment. Is that correct? A. Yes.

Q. Then you regard that as quite a distinction, do you?

A. Sheppard leads into the box. Sheppard valves on each one. I would say that's quite different. No refrigerator has such going from the pipes, nothing but brine.

Q. That's refrigerant. Brine is a refrigerant, isn't it? [623]

A. Yes, but not a refrigerant that is subject to an expansion valve or any regulation of that type.

Q. Well, in the commercial there are two separate coils and the two compartments are cooled independently? A. Yes.

Q. And your distinction is that, that being true, it's unlike the patent in suit in that there are two coils in series and the refrigerant passes through both of them, the same refrigerant. That's correct?

A. Yes. And the refrigerant directly from the machine.

Q. Yes. A. That's right.

Q. And you read that as quite a difference?

A. Yes, sir. One, a secondary refrigerating result to the other as a primary refrigerating result.

Q. Yes. Well, let's see——

Mr. Byron: I think that's all."

The Court: That completes the deposition. Mr. Cuningham?

Mr. Cuningham: Now, if your Honor please, I would like, whenever you want, to start the deposition of Mr. Quinn.

The Court: Have you got a short live witness?

Mr. Cuningham: No, sir. I am sorry, too. It would be a welcome break.

Mr. Ramsey: What about Steele? That is [624] short.

Mr. Maguire: We do not want to put that in out of order.

The Court: Do you want to start reading the Quinn deposition now?

Mr. Cuningham: Yes, sir.

The Court: Very well.

Mr. Cuningham: I will state for the record that this was a deposition taken in New York.

The Court: Does all of the Quinn deposition, except that which I have previously passed upon, go in?

Mr. Cuningham: No, your Honor, it was my undertaking this morning to omit certain sections that your Honor will pass upon later, but there are only two, I believe.

The Court: Start in on the Quinn deposition. We have got about fifteen minutes.

Mr. Cuningham: I am trying to locate the date.

The Court: April 5th and April 14th, 1955?

Mr. Cuningham: I think those are the days that notices were served, but I can state that—oh, April, 1955, in New York, at the offices of Monitor Equipment Company.

The Court: Very well; proceed. [625]

(Thereupon the deposition of Theodore K. Quinn, a witness called to testify on behalf of the Plaintiff, April 19, 1955, at the offices of Monitor Equipment Company, 640 West 249th Street, New York, N. Y., was read into the record as follows: Mr. Cuningham reading the questions and Mr. Harold Hart, Court Crier, reading the answers.)

DEPOSITION OF THEODORE K. QUINN

"Q. Mr. Quinn, will you please state your name?

A. Theodore K. Quinn.

Q. Where do you reside?

A. Roxbury, Connecticut.

Q. What is your occupation?

A. I am President of the Monitor Equipment Corporation and of the T. K. Quinn Company.

Q. Do you appear in response to a subpoena, Mr. Quinn? A. I do.

Q. Have you a copy of that subpoena with you, or is that in the other room?

A. It is in the other room.

Q. Can you tell us briefly, Mr. Quinn, how you came to testify in this case, in response to whose request, and so on?

A. I think it was in response to a request from you, Mr. Cuningham. [626]

(Deposition of Theodore K. Quinn.)

Q. Can you recall approximately when I first asked you to testify in this case?

A. Well, you are handing me a letter here which is dated February 6, 1953, and I believe that was the——

Q. (Continued): Letter from whom to whom?

A. From Cuningham addressed to me and Mr. Zimmerman.

Q. I did that for the purpose of helping you fix the date, Mr. Quinn. Does that help you fix the date when we first discussed the testimony?

A. It must have been shortly thereafter. I don't recall the exact date.

Q. Sometime in February?

A. Yes, sometime in February.

Q. 1953? A. Yes.

Q. Have you been paid anything, or promised any fee, for testifying in this case?

A. No. I wouldn't accept it if it were offered.

Q. Have you any pecuniary interest in the outcome of this litigation?

A. None whatever.

Q. Or the expectation of ever having any?

A. None whatever.

Q. Mr. Quinn, what is the business of Monitor Equipment Company? [627]

A. Monitor Equipment Corporation is a manufacturer and selling agency for a washing machine. The T. K. Quinn Company is a management company, a partnership.

Q. Is the Monitor Equipment Corporation a

(Deposition of Theodore K. Quinn.)

New York corporation? A. Yes.

Q. Is the T. K. Quinn & Company a partnership and not a corporation? A. That is right.

Q. What is the significance of the name, Monitor, to you, Mr. Quinn?

A. That has a history.

Q. Well, we followed signs to this delightful residence——

A. Monitor was the name which we first gave to the General Electric Refrigerator to describe the physical appearance of the machine. We got the idea from the old Monitor Cruiser, you know, that fought in the Civil War.

Q. Monitor and Merrimac?

A. Monitor and Merrimac, yes, and it was replaced or superseded by the more modern machine and the Monitor top was eliminated.

Q. Well, I will cut you short because that was merely preliminary. I take it, then, you have had some connection with the household refrigerator business? A. Oh, yes.

Q. Can you give us briefly, and fix the time for us if you [628] can, a statement as to what your past history in the household refrigerator business has been?

A. In 1927 I was Assistant Manager of the Lamp Division of the General Electric Company in Nela Park, Cleveland. The Company had done some experimental work in its Engineering Laboratories in Schenectady on a domestic-type refriger-

(Deposition of Theodore K. Quinn.)

ator, and the President of the General Electric Company called on me to look into it and to report on whether I thought a business could be built on the development.

Q. That was Mr. Swope, was it?

A. In 1927, Mr. Swope.

Q. Mr. Gerard Swope?

A. Mr. Gerard Swope, President of General Electric Company. That was in 1927. We started out then, first, changing the appearance of the machine very markedly, putting it up on legs, and producing a white instead of the old—a white and a metal box eventually, as distinguished from the earlier wooden models.

Q. Were you in charge of that business, Mr. Quinn?

A. Yes, I was Manager of the business in, I think it was about March or April of 1927.

Q. And continuing through what year?

A. And continuing until about 1930, at which time I was made a Vice-President of the General Electric Company, and continued in charge of the refrigerator business, but I had [629] added responsibilities in connection with the whole line of General Electric appliances. But I was in charge of the refrigerator business, not exclusively, but as part of my other responsibilities, until I left the General Electric Company on January 1, 1936.

Q. Have you held the following offices: Chairman of the General Electric Company's Sales Committee and Member of the Advisory Board, the first

(Deposition of Theodore K. Quinn.)

Chairman of the Board of the General Electric Company's Contracts Corporation, and Vice Chairman of the Board of the General Electric Supply Corporation, and a Director in several other General Electric subsidiaries?

A. Yes, sir; all of those offices."

(Discussion off the record.)

"Q. Do you know Mr. T. Irving Potter, Mr. Quinn? A. I do.

Q. How long have you known him?

A. I never knew him very well, but we met in some of the early refrigeration meetings, probably as far back as 1930 to 1932.

Q. You knew him as a fellow member or competitor in the refrigeration industry?

A. Yes.

Q. Did you meet him at industry meetings, and so on, at [630] conventions?

A. As I say, I am not very clear as to the exact date, but I know that he was a manufacturer, that he was in Buffalo, I believe, and I think he was a member of the Refrigerator Association—the Refrigerator Manufacturers Association.

Q. I show you, Mr. Quinn, a copy of Reissue Patent No. 23058, dated December 14, 1948, and ask you whether or not you have ever seen this patent before?

A. Yes, I have seen it."

(Discussion off the record.)

(Deposition of Theodore K. Quinn.)

Mr. Byron: Page 11.

Mr. Cuningham: Skipping the top of Page 11:

"Q. Mr. Quinn, have you ever been called upon to testify in connection with any public issues and particularly in connection with any small business inquiries of the Government?"

Mr. Byron: I object there. It has nothing to do——

The Court: Objection sustained.

Mr. Cuningham: Does that mean that I may read the next question, your Honor?

The Court: It is qualifying him for what? What is he going to be qualified for?

Mr. Cuningham: Well, simply to give his general qualifications, [631] not as an expert, of course, patent. He is a man of very wide experience, obviously.

The Court: Read the next question.

"Q. When was the last time you so testified, and on what occasion?"

Mr. Byron: Now, I see no reason why that should be answered; totally immaterial to the——

The Court: Let it go in.

Mr. Byron: Well, it is prejudicial.

The Court: We have been letting in a lot of evidence that has no relevancy, and if he wants to get in the fact that he has acted before, that is all right with me. Go ahead.

"A. I served as a Panel Member for the Joint

(Deposition of Theodore K. Quinn.)

Senate and House Committee on the President's Economic Report in February of 1955.

Mr. Byron: What year was that?

The Witness: Last February—the month before last, 1955.

Q. (By Mr. Cuningham): Did that testimony take place in Washington? A. Yes. [632]

Q. Now, as I recall your testimony, it was that through the years 1927 to 1932, you were in charge in various capacities of the General Electric refrigeration business? A. Yes.

Q. Was that a new business endeavor of G.E. in 1927—had they ever been in the refrigeration business before?

A. The General Electric Company had started about two years earlier to develop a domestic type of refrigerator and had previously manufactured a commercial refrigerator, but it did not become a major department of the Company, nor did the Company go into the business actively on a large scale until I became manager in 1927. It was then set up as a separate department, reporting directly to the President of the General Electric Company."

(Discussion off the record.)

"Q. I show you, Mr. Quinn, from the record, on Page 2404 of the Stewart-Warner cases, what was marked in those cases, Plaintiff's Exhibit 222, and ask you if you recognize the refrigerator illustrated there?

A. Yes, I do. It brings back many memories."

(Deposition of Theodore K. Quinn.)

Mr. Cuningham: Your Honor, we may have a little mixup on some of these exhibits finding them.

(Discussion off the record.) [633]

Mr. Cuningham: I think it can be straightened out if I may continue with the reading.

"Q. I show you a large photostat of what appears to be the full ad, and according to the date in the middle of the double-page spread, it appeared in The Saturday Evening Post, June 4, 1927. Can you identify that ad?

A. Yes, I remember it well. It was our announcement advertisement in double spread."

Mr. Cuningham: I offer that in evidence as Plaintiff's Exhibit 3-D.

Mr. Byron: Object to it. It has no materiality.

The Court: I thought all of these things had been agreed upon.

Mr. Cunningham: Your Honor, this is simply what Mr. Quinn is testifying about in 1927, the old G.E. refrigerator with a Monitor top. It is an illustration of it.

Mr. Maguire: State of the art.

Mr. Cunningham: It is also the state of the art, but it is illustrating what he is testifying.

Mr. Byron: I will not press the matter, but it has no materiality.

The Court: It will go in. I think the jury knows by this time that a lot of testimony that has no relevancy [634] to this case has gone in, and the

(Deposition of Theodore K. Quinn.)

probabilities are there is going to be a lot more on both sides. It refers to the state of the art. It is admitted.

(Photostat of ad above referred to, previously marked Plaintiff's Exhibit 3-D for Identification, was received in evidence.)

"Q. I notice in this ad, and I hope that we will all discount the usual puffing usually found in advertisements of this type, that this refrigerator is stated to be the creation of General Electric, the leading 'research organization of the world. It marks 15 years of intensive research.' Did the General Electric Company have a large and effective research organization at that time, in 1927, Mr. Quinn?

A. Well, as you say, advertising takes some liberties. We had been working on a commercial machine using the sealed mechanism for commercial purposes at the Fort Wayne Works for a number of years, but it was a very small business, and was not actually in the Research Laboratories.

Q. Who was the 'daddy' of this Monitor-top business, Mr. Quinn—the structures I should say?

A. Actually, the Monitor top sealed mechanism is an adaptation of an invention by a French monk, Abbe Audiffron. The original patents were held in England and the company that [835] owned it licensed or arranged otherwise with the General Electric Company to produce the sealed mechanism on a commercial refrigerator to the General Elec-

(Deposition of Theodore K. Quinn.)

tric Company, and a number of machines were made for that purpose by the General Electric Company at the Fort Wayne Works, but the business was a small business, and never amounted to very much. It was impractical because of the size of the unit."

Mr. Cuningham: I think I should omit this in view of what I am skipping, sir.

Mr. Byron: Yes, that is right.

(Discussion off the record.)

Mr. Cunningham: This is omitted until your Honor recesses.

"Q. Now, will you please explain generally the construction of that refrigerator illustrated in Plaintiff's Exhibit 3-D?

A. Well, as you see from the exposed box, it consists of an evaporator in the box and the expansion coils on top. The cabinet was an entirely separable unit, and the machine, the refrigerating mechanism, was simply placed on top in such a way as to fit the cabinet and complete a refrigerator.

Q. Did that have any moisture control in the food compartment? A. No. [636]

Q. Did the heat-conducting surfaces of the expander operate at temperatures above or below 32 degrees Fahrenheit?

A. By heat-conducting surfaces you mean the——

Q. (Continued): That expander coils.

(Deposition of Theodore K. Quinn.)

A. I should say that they operated under 32 degrees.

Q. Did they frost up?

A. Oh, yes. Defrosting was quite a problem.

Q. Would this be what is called a moist cold refrigerator? A. No, I should say not.

Q. I show you on the next page of the Stewart-Warner record, namely, Page 2405, another advertisement from the Saturday Evening Post at a later date, I believe, February 11, 1928. Was that substantially the same construction as that shown in Plaintiff's Exhibit 3-E?

A. Yes, almost identical. The refrigerator mechanism is the same, but the cabinet construction is different."

Mr. Cunningham: I offer that in evidence as Exhibit 3-E, Plaintiff's Exhibit.

Mr. Byron: Same objection.

The Court: Same ruling; let it go in.

(Photostat of ad above referred to, previously referred to, previously marked Plaintiff's Exhibit 3-E for Identification, was [637] received in evidence.)

"Q. Mr. Quinn, for the period beginning in 1927 to 1933, was it substantially the same construction as shown in these two exhibits put out as a household refrigerator of General Electric Company? A. Yes, we made no basic changes.

Q. Were you familiar during those years with competitive household refrigerators on the market?

(Deposition of Theodore K. Quinn.)

A. Oh, yes.

Q. And did any of them, if you recall, any of the leading ones, have moisture control or be a moist cold refrigerator? A. They did not.

Q. I show you from the record Page 2185 of the Stewart-Warner record a copy of what was apparently marked 'Plaintiff's Exhibit 189' in the Stewart-Warner case and running through to 2189—including 2189—an advertisement also from the Saturday Evening Post dated January 25, 1930. This is by Frigidaire and shows a thing called a 'hydrator.' Do you recognize the device shown there? A. I do, indeed.

Q. Can you tell us briefly what the story of the 'hydrator covered dish' was?

A. Well, we had a serious problem in the early domestic machines. I mean the whole industry had the problem. The [638] food in the refrigerator tended to dry out and, of course, we were at that time keenly competitive, and the Frigidaire, the General Motors product, introduced what they called a hydrator. It was simply a covered pan which they inserted in the bottom compartment in the refrigerator and gave it a fancy name, the idea being that it could be used particularly for vegetables, and having a cover on it, would keep them from drying out.

Q. Would you accept my statement—was that the pumping of moisture——

A. I recall very definitely that I was in Florida at the time, and when this advertisement first ap

(Deposition of Theodore K. Quinn.)

peared with the fancy name, hydrator, I immediately arranged to see one of them on the floor at a store in Miami, and I wired in to, or telephoned in to the office, and told them to buy 20,000 pans quick and start putting them into the shipments that were being made from then on, so that we would then match what Frigidaire had done. We called ours simply what it was—a vegetable pan. I dare say the cost of the Frigidaire advertising was worth more than the cost of the pans.

Q. Was Frigidaire first on the market, as compared with G.E., with household refrigerators?

A. Oh, yes.

Q. About how many years had they preceded the G.E.? [639]

A. As I recall, they brought out the old Isco perhaps five years before General Electric started seriously in the business.

Q. Can you name some of the old, well-known manufacturers other than G.E. when they came into the business?

A. The Kelvinator was the principal competitor, the other principal competitor in the business. There was also Servel, Incorporated, and some smaller manufacturers.

Q. I direct your attention to Page 2189 where there is a group portrait of what is entitled Frigidaire Engineering Department Personnel. It is a rather small photograph. Do you recognize anybody in that group?"

(Deposition of Theodore K. Quinn.)

Mr. Byron: Your Honor, I really do not see any sense to this type of testimony.

Mr. Cuningham: I would be willing to skip that, sir.

The Court: I think this is a good time to take a recess. I think we ought to come back at 1:30 today, and we are going to quit about 4:00 o'clock. Remember what I said before. We are not coming back until Monday at 1:00 o'clock when we leave today.

(Discussion off the record.)

The Court: We will adjourn from Wednesday to the following Monday. Recess until 1:30.

(Thereupon the jury retired for the noon recess.) [640]

The Court: Mr. Byron, this is the very thing that has happened that I anticipated would happen. That is why I asked the question, have you agreed on the sections to go out. [641]

The Court: I think yesterday I announced that from now in I am going to permit the person to read all of the deposition except those parts which are previously objected to. So if you are going to object to any portion of the Quinn deposition could you let me see it about 1:10 this afternoon so I could look it over?

Mr. Byron: I think I can tell you. We are not going to object any more to Quinn.

Mr. Cuningham: And nothing that follows.

(Deposition of Theodore K. Quinn.)

Mr. Byron: Just a moment. I will check and see if I have any notes.

Mr. Cuningham: That was my understanding, if it helps you.

The Court: Well, what about this portion of the transcript which you are not reading on the theory that you want me to pass upon something?

Mr. Cuningham: Well, I don't expect to do that, sir. I expect to read everything unless I come to some colloquy. I think we marked that all out.

Mr. Byron: Well, there is some stricken by order and that's the only thing I care about.

Mr. Cuningham: Which page?

Mr. Byron: 31, the bottom, all of 32, top of 33. First half of 33.

Mr. Cuningham: That is absolutely correct, sir. I am [642] going to omit that.

Mr. Byron: Well, then, there is no further objection in respect to the Quinn on my part.

The Court: All right. Recess until 1:30.

(Thereupon, at 12:10 o'clock p.m. an adjournment was taken until 1:30 o'clock p.m.) [643]

Afternoon Session

(Court reconvened, pursuant to adjournment, at 1:30 o'clock p.m., and the following further proceedings were had herein:)

Mr. Maguire: I want to apologize for my associates. They happen to be on a long-distance telephone call. They will be here in just a moment.

The Court: Do you want to take over?

Mr. Maguire: Oh, I will take over. Where were we?

Mr. Lucas: On page 118.

Mr. Byron: 18.

Mr. Lucas: Correction 18.

Mr. Maguire: The next thing will be the answer. Well, maybe it will be well to read the question, too.

The Court: Go ahead.

DEPOSITION OF THEODORE K. QUINN

Direct Examination
(Continued)

By Mr. Maguire:

"Q. I direct your attention to page 2189 where there is a group portrait of what is entitled Frigidaire Engineering Department Personnel. It is a rather small photograph. Do you recognize anybody in that group?

Mr. Byron: I object. This has no significance here whatsoever; it has nothing to do with the question of infringement and validity of the claims in issue.

A. It isn't a very good reproduction, and I can't identify anyone. [644]

Q. Well, can you tell us, Mr. Quinn, whether or not Frigidaire had a large research staff?

A. Oh, yes.

Q. In the refrigeration business?

A. Oh, yes; by that time the business for each of us was about in the neighborhood of $50 million a year, and we had in the General Electric Com-

(Deposition of Theodore K. Quinn.)

pany Refrigerator Engineering Department scores of men, and I know that they had, too, as did Kelvinator, a comparable staff.

Q. Now did the General Electric Company make any efforts to solve this problem of drying out of foods, or however you characterize it?

A. We were quite conscious of the problem, as was also Frigidaire and Kelvinator. The heads of those organizations used to meet with me on many occasions to discuss industry problems. We first heard—the first I ever heard about moist cold was from Mr. H. E. Beichler, since deceased, who was General Manager of the Frigidaire Division. He wanted to know what we were going to do about the moist cold. At that time our problem was—we were competing—at that time we were competing with the old icebox which sold all the way from $25 to $100, and we were getting for our refrigerators from $300 to $500 or $600. Our problem was to keep the cost down, and we were after mass production, of course, and [645] realized that we wouldn't get the sales if we added any costly parts or changes, and so we tacitly agreed among ourselves that we would stick to what we were doing and hold the price down as low as we could, so as to get more of the market.

Q. Was this hydrator pan a partial solution to the problem of the drying out of foods?

A. Well, I should say it was a very negligible solution, because after all, it simply amounted to putting a covered dish inside of the refrigerator.

Q. You wouldn't call it fundamental engineer-

(Deposition of Theodore K. Quinn.)

ing? A. Oh, I should say I would not."

Mr. Maguire: Now, there is a marketing of certain exhibits and I do not have them here.

The Court: Well, I think you can go right down to the bottom of the page.

Mr. Maguire: And we can go back to those.

The Court: Any time.

Mr. Maguire: Fine. Thank you so much.

"Q. Prior to 1930, did any leading manufacturer ever put on the market a combination or two-food containing compartment refrigerator that you know of—prior to 1930?

A. I don't believe so.

Q. I show you a copy of the General Electric Review for September, 1952, and direct your attention to page 37, Mr. Quinn. [646] The illustration on the left-hand side, showing such a two-compartment refrigerator, and I also direct your attention to the description of the refrigerator illustrated which appears in the middle column on page 39 of that issue, or article. That construction is stated to be 'before 1930' on page 39, and on page 37, the title of the illustration is—and I quote—'Developed in the early 1930's.' Did you have any knowledge of this particular two-compartment General Electric refrigerator?

A. Yes, I recall it as an experiment that was attempted.

Q. Was it ever marketed? A. No.

Q. Was it a white box-like structure in the lower compartment shown in the photograph?

(Deposition of Theodore K. Quinn.)

A. I can't make it out. It may very well have been another vegetable compartment.

Q. You are not certain of that?

A. I am not sure of that.

Q. Was that a dry cold refrigerator as distinguished from moist cold? A. Yes."

Mr. Maguire: Next comes the marking of exhibits and if we may have an understanding till Mr. Cuningham comes back——

The Court: Wait till Mr. Cheatham comes back.

Mr. Maguire: Thank you, your Honor, so [647] much.

"Q. Now I show you, Mr. Quinn, a photostat of apparently the front page of the Merchandise Section of Electric Refrigeration News dated February 24, 1932, and attached are pages numbered 13 through 32, being an advertisement of a refrigerator, and I ask you if you recognize that advertisement.

May I say for the record that this was formerly Plaintiff's Exhibit 109 in the Stewart-Warner record. It is not reproduced in the printed record.

A. Yes, I recall this advertisement.

Q. Do you recall seeing it on or about the date it bears in 1932?

A. Very vaguely, but whether that was the time or not that is fixed in my mind, I am not so sure, but I distinctly recall quite a stir in the industry.

Q. Created by this announcement?

A. Yes, by this announcement of this Tricold.

(Deposition of Theodore K. Quinn.)

Q. Was that, so far as you know, Mr. Quinn, the first announcement of a two-temperature refrigerator having moist cold storage capacity?

A. Yes, sir."

Mr. Maguire: May I stop for a moment? There have been two places heretofore, and we are coming to the third one where there have been exhibits identified, and counsel were very courteous and said we could await your arrival, and the Court consented with even greater courtesy (speaking [648] to Mr. Cuningham).

The Court: Well, there is nothing to wait for because this exhibit has been admitted in evidence.

Mr. Maguire: All right, sir, and I am very appreciative.

"Q. Will you tell us what you mean by 'quite a stir in the industry,' Mr. Quinn? Did you discuss this with other members?

A. Yes, I believe I have already mentioned Mr. Beichler, of Frigidaire, who called it to my attention. He was anxious to know whether the General Electric Company was going to attempt to get into the moist cold field, having in mind, presumably, that if we did that, Frigidaire would have to follow, but for the reasons I have already mentioned, we, together with Kelvinator, the three of us had 80 or 90 per cent of the business and we could pretty much direct its course, and we didn't want to do anything that would tend to increase the price, and therefore decrease the market. We were after mass production of the lowest possible price units.

(Deposition of Theodore K. Quinn.)

Q. What percentage of the market in 1932 did the Trico Refrigerator Corporation have, if you recall; was it large or small?

A. Very small, I should say.

Q. Were they a newcomer in the field?

A. Yes.

Q. Was that connected with Mr. Potter in your mind?

A. Yes, I understood that it was Mr. Potter's Company, and [649] understood also that he was associated in some way, or at least purchased his cabinets from the Jewett Icebox Refrigerator Company of Buffalo.

Q. Did you have any contacts with the Jewett Company?

A. Yes, as I think I previously explained, the General Electric refrigerator was made in two parts. The refrigeration unit was separate. The icebox, the box itself, we were not then in a position to make in the quantities in which we wanted them and we went to the leading refrigerator icebox manufacturers, such as Jewett and Seegar, and had them manufacture many thousands of boxes, or cabinets, for us.

Q. Did they work with you or G.E. on the design of these cabinets?

A. Oh, yes. At that time, Jewett was probably the outstanding manufacturer from a quality standpoint of iceboxes.

Q. Did you ever know a gentleman at that company named Ferdinand J. Bommer?

(Deposition of Theodore K. Quinn.)

A. I don't recall that name.

Q. Did you ever know of him in connection with the Potter Enterprises, such as Trico or Tricold?

A. I don't recall the name. The man whom we dealt with at Jewett, I believe, was Edward Jewett, it just occurs to me.

Q. Now, Mr. Quinn, did the General Electric Company ever attempt to market a double-compartment box very much like that shown in the illustration at the top of page 39 of the [650] GE Review?

A. Yes, we attempted to combine two boxes. It amounted to just taking two refrigerators and putting them together.

Q. Did you have two units?

A. Yes, we had two separate units. This isn't shown here, by the way.

Mr. Cuningham: My notes indicate that it is at the top of page 39.

The Witness: No, there is another one somewhere. I don't know whether it is in here, but it was just simply a matter of two boxes put together with two units and they were joined at the sides.

Q. That is, two units at the top? A. Yes.

Q. Is it somewhat like that illustrated on the left-hand side of page 39?

A. Yes, except there would be another one right alongside of it, joined to it.

Q. Did they have four legs or six legs, or how many legs, if you recall?

A. I think four legs.

Q. Did you furnish an extra set of legs with

(Deposition of Theodore K. Quinn.)

these boxes? A. I don't recall."

Mr. Maguire: There is colloquy by counsel, and unless somebody wants it we will omit it. Is that all right? [651]

The Court: Read the next answer, Mr. Hart.

The Crier: "A. Oh, yes, all the refrigerators manufactured by the General Electric Company while I was there were dry cold refrigerators.

Q. In short, is that merely two G.E. Monitor top refrigerators operated together in different temperatures?

A. Yes, it gave us a larger total food compartment, and then also you could run one refrigerator at a different temperature than the other in a way that there was less drying, if you were willing to accept a lower freezing capacity, but the problem always was to freeze ice in the evaporator, and you had to have a freezing temperature, and if you had that freezing temperature, then you got the drying out to which you have referred here.

Q. Was this announcement of the Tricold refrigerator the first effort at a fundamental solution to that problem? A. So far as I know."

The Court: Go ahead. "Was this G.E. double refrigerator development successful, Mr. Quinn?

A. No, it never really amounted to anything.

Q. Can you give us a date for that development? Will you please; as closely as you can?

A. It would be largely a guess.

(Deposition of Theodore K. Quinn.)

Q. Well, was it prior to your getting out of the Refrigerator [652] Department?

A. Oh, yes, it was probably about 1930.

Q. Now, illustrated in the Plaintiff's Quinn Exhibit 8"——

Mr. Maguire: This Quinn Exhibit number will not be the number in this case. We will furnish the number a little later.

Mr. Cuningham: 3-H.

Mr. Maguire: 3-H.

"Q. ——on the right-hand side of page 37, is apparently a G.E. two-compartment box. Can you tell us when that came out, approximately?"

The Court: Let Mr. Cuningham show it to the jury.

Mr. Maguire: Defendants have not yet seen it.

Mr. Kolisch: We haven't seen it.

The Court: Haven't you ever seen it?

Mr. Kolisch: No, sir.

Mr. Cuningham: It's the "GE Revivew." They have copies of it.

The Court: Let them take a look.

Mr. Cuningham: It's all right.

"Q. (By Mr. Maguire): Now, illustrated in the Plaintiff's Quinn Exhibit 8, on the right-hand side of page 37, is apparently a G.E. two-compartment box. Can you tell us when that came out, approximately? A. I am afraid I can't. [653]

Q. Well, was it after you left?

A. That would be after 1936.

(Deposition of Theodore K. Quinn.)

Q. After '36? A. Yes."

The Court: Just one second. Get that exhibit and show it to them right in front because otherwise we have to stop. Mr. Maguire doesn't want to keep on reading while the jury is looking. Everybody look at that, just get acquainted with what he is doing and talking about.

(Whereupon Mr. Cuningham displayed the document to the jury.)

"Q. (By Mr. Maguire): Did that particular two-compartment box becomes a successful item?

A. Oh, yes, it is one of the standards in the industry today.

Q. Are similar structures sold by the leading companies today?

A. Oh, yes, all of them.

Q. I show you an illustration which I tore from my copy of Life Magazine dated April 18, 1955, an advertisement of the Hotpoint Company. Is that a similar refrigerator sold today?

A. Yes, sir."

Mr. Cuningham: Plaintiff's Exhibit 3-J.

The Court: All right. It may be admitted.

(The document, being Hotpoint ad inside cover "Life" magazine, April 18, 1955, [654] was admitted in evidence as Plaintiff's Exhibit 3-J.)

Mr. Maguire: "Q. What can you say, Mr. Quinn, with respect to the opportunities for making profit out of such two-compartment boxes as com-

(Deposition of Theodore K. Quinn.)

pared with the opportunities of making profit with the conventional dry cold type of refrigerator?

Mr. Byron: I object to that, for the same reason.

Mr. Cuningham: On the ground of irrelevancy?

Mr. Byron: Yes.

A. The only reason that we didn't move to make some arrangement with Mr. Potter on the moist cold development was that at that time it would have substantially increased our cost, as we saw it, and would have resulted in higher list price, and that therefore, theoretically at least, lower sales. Of course, it is always advisable if you can to sell a higher-priced unit, because with this same percentage margin, your profit dollars are more, and if we had felt then at that time that we could have had the same number of unit sales at a higher consumer price, we would have adopted it—all of us. I am referring now to the three leading manufacturers—Frigidaire, Kelvinator and General Electric, who worked closely together.

Q. Following the introduction of this so-called Tricold two-temperature box illustrated in Plaintiff's Quinn Exhibit 9"——

The Court: Is 9 already in? [655]

Mr. Cuningham: Yes, your Honor; that is already in as 3-U.

The Court: All right.

Mr. Cuningham: It's marked over again 3-I by us.

Mr. Maguire: "Q. ——what was the first similar structure that you recall of another make?

(Deposition of Theodore K. Quinn.)

A. I am afraid I don't recall specifically any one.

Q. Did a lot of them come in there after?

A. Well at some time later, a good deal later. You see, we were a very close-knit group, the three major manufacturers, and we could decide what to make popular and what not. We in that way, for example, excluded the 'In-A-Door' shelves development. So we regarded this as a very small thing, and one that need not give us any trouble, at least for some years, until there was some greater acceptance of the idea.

Q. That is, you regarded it as a small commercial threat at the time? A. That is right."

Mr. Maguire: Colloquy 1 will omit.

"Q. Did you regard this as a minor development?

A. No, it was an important development. There is no question about that. It was important enough so that Mr. Beichler brought it up at our meetings, as I have testified, and was fearful that we or Kelvinator might adopt it, in which case they would have to, too. There was no question about its [656] almost revolutionary effect, but the market—and I am repeating—was just not ready, we thought, for a higher-priced refrigerator, which we then believed this one would inevitably be. Subsequently, of course, they have learned how to make them less expensively, but we wouldn't have known how [657] then.

Q. If this development had been in the hands of

(Deposition of Theodore K. Quinn.)

one of the larger companies, would your attitude have been the same, you at General Electric?

A. If either one of the three leading manufacturers who had together upwards of——

If either of the three leading manufacturers, Frigidaire, Kelvinator and General Electric, having upwards of 80 per cent of the market, had adopted this development, the others would have had to do it immediately, and we all recognized that.

Q. Mr. Quinn, I have before me a publication entitled——"

The Court: Wait a minute. That went out.

Mr. Maguire: No, your Honor, our copy may be erroneously marked, but the matter which goes out on our copy starts by "Mr. Byron: I object—" and so on.

Mr. Byron: I had this stricken on order of the Court, beginning, "Mr. Quinn, I have before me a publication entitled——"

Mr. Cuningham: That is correct.

Mr. Maguire: I am very sorry. Our copy was not so marked.

The Court: All right, Mr. Maguire.

Mr. Maguire: My fault.

The Court: Mr. Maguire was not there at the time the [658] rulings were made.

Mr. Maguire: Going to Page 32——

Mr. Cuningham: No, that is out.

Mr. Lucas: If your Honor please, we start in the middle of Page 33.

(Deposition of Theodore K. Quinn.)

(Discussion off the record.)

The Court: I might say here that that completed Mr. Quinn's testimony, his direct testimony, and now this was cross-examination by Mr. Byron.

"Cross-Examination

By Mr. Byron:

Q. First, I would like to have you testify just a little bit more about relative costs of refrigerators of the so-called Potter type and the types which the other three companies which you have mentioned, G.E., Frigidaire and Kelvinator, were making. Just why would the so-called Potter type of refrigerator cost more to produce than the other types?

A. Well, you are asking me now something that goes back about twenty-five years. I can only tell you that we looked into it at that time, and that it was our judgment then that it would be too costly to make, and that was not only my opinion but also the opinion of both Frigidaire and Kelvinator.

Q. Specifically, why? [659]

A. I can't tell you exactly, because I am not a technical man.

Q. Well, you have made the assertion. Now you must have a reason for it.

A. Yes, I do, because I was an executive in the General Electric Company because our cost people reported to me that there would be additional costs, and substantially additional costs at that time. I accepted that.

(Deposition of Theodore K. Quinn.)

Q. The same parts were used in all of these refrigerators, were they not, substantially so?

A. No, they were different. We had——

Q. In what respect?

A. Well, we in General Electric made a sealed type of machine which was entirely different in the beginning from what we called the open type made by Kelvinator and Frigidaire. They didn't adopt the sealed mechanism for a long time after that. The adaptation of the moist cold Potter invention to either one of the three machines would have been different, substantially different, as between the open type of machine and the sealed machine.

Q. What do you mean by 'sealed machine'?

A. In the sealed mechanism—I am sorry—I thought that was understood. All the working parts——

Mr. Byron: You are giving the testimony before a court and jury. [660]

Mr. Cuningham: I object. Let him finish.

Mr. Byron: I want him to explain it. I may know.

A. (Continued): The sealed machine has all of its working parts enclosed in a hermetically sealed unit."

Mr. Byron: I thought the colloquy was out.

Mr. Cuningham: He just read it, but I would be willing——

Mr. Lucas: I apologize. I got into it.

(Deposition of Theodore K. Quinn.)

"A. The sealed machine has all of its working parts enclosed in a hermetically sealed unit, free from air and dirt and moisture, sealed up forever. The open-type machine, on the other hand, had a belt and a fan and its exposed working parts. Since then, of course, all of the manufacturers of domestic type machines have adopted the sealed-type mechanism.

Q. Now, I am not clear yet what is meant by sealed mechanism. Your refrigerant, of course, was sealed in a coil, wasn't it?

A. Yes. In a sealed machine everything is sealed; the moving parts.

Q. Well, just what did the moving parts include, which were all sealed?

A. Compressor pump—the compressor pump and the refrigerant and the oil that makes it [661] work.

Q. Now, that was quite an expensive unit, wasn't it?

A. No; as a matter of fact, it is the least expensive of all the units. We didn't think so at the time, but it was proven to be and that is why the whole industry has since adopted it.

Q. Well, now, in that unit there was a compressor, and there was a condenser, and I suppose there was a receiver for the condensed refrigerant, and then the condensed refrigerant was passed through a coil, was it not?

A. That is right.

Q. For what purpose? A. Cooling.

(Deposition of Theodore K. Quinn.)

Q. That is, for cooling the refrigerator, the inner portions of the refrigerator? Yes or No?

A. I don't know that I can answer that Yes or No.

Q. Well, the place where you put the food——

A. A refrigerator essentially, contrary to the popular notion, is not a method of pumping cold in.

Mr. Byron: Correct.

A. (Continued): It is one of taking the hot air out through the medium of a refrigerant.

Q. All right; and that is what this refrigerating unit, the General Electric, did. It extracted the heat from the spaces in which the food was placed?

A. They all do. [662]

Q. Well, now, the General Electric and these other corporations, they had to have a cabinet, of course? A. Yes.

Q. And they had one or two compartments in the cabinet? A. Yes.

Q. Now, what more did Potter have in the way of equipment that would cost money other than what you have mentioned about the G.E.?

A. I have already told you: I am not a technical man, and I don't think that I could get into the question of the exact application of the Potter invention to the then types of refrigerators because I couldn't explain it to you. I only took the word of our people because we did look into it at the time.

Q. The estimators in General Electric back in

(Deposition of Theodore K. Quinn.)

those early days of 1932, -3, -4, and -5 were just as capable as the estimators today, weren't they?

But later you say that you found that these estimates—the costs—would not have been any higher than the Potter—the Potter refrigeration costs would not be higher than the refrigeration of G.E. and Kelvinator; is that right?

A. I would have to explain that in this way: When you are making a product in mass production, you hesitate to make any change. The least expensive thing, the least [663] costly thing to do is to continue to do exactly what you are doing, and any change that you make is very expensive on line production, and all of the pressure on you is to continue making what you are making. Now I suppose I could make a comparison with an automobile; that today we have many conveniences and additions to the automobile that are acceptable today, such as power steering and power brakes and windows that go up and down automatically, which you wouldn't have thought of in those days. Their costs would have been prohibitive.

We looked at that then as you would look at trying to do it under those circumstances in that way.

Q. But you did make changes in your various refrigerators during the '30's, up through the '30's, did you not?

A. Minor changes. We kept to the sealed mechanism pretty much. The principal changes in the

(Deposition of Theodore K. Quinn.)

industry for many years was in the box construction.

Q. What type of refrigerator has the General Electric Company been making since this year which I think you mentioned, 1936, just after you left? They changed to a different structure, and that, I think, you say is shown in Plaintiff's Exhibit 3-H, on Page 37.

A. Yes, this one has a separate—and entirely separate—compartment for frozen food, as you will see—entirely separate, as compared to the one we were making—— [664]

Q. You are referring to Plaintiff's Exhibit 3-H on Page 37. Now, does that refrigerator, the General Electric refrigerator, have a compartment which is moist cold?

A. I think it has. I am not sufficiently familiar with the models, but I believe—and I can't identify them just by the pictures—but I believe it has.

Q. And which would be the moist cold compartment—the one containing the usual storage of food or the one which is frozen?

A. Well, it is all affected by the moist cold principle if it is a moist cold refrigerator.

Q. That is what I am asking you: whether it is a moist cold refrigerator?

A. I can't identify it by the picture.

Q. When did General Electric start to make a moist cold refrigerator as illustrated on Page 37 here on this exhibit? A. I can't recall.

Q. You left in 1936, in January; how soon after?

(Deposition of Theodore K. Quinn.)

A. I can't remember.

Q. You have kept in touch with refrigeration, haven't you?

A. I am not close enough to give you that date.

Q. Would it be three years?

A. I would rather not guess. I would rather not say, because it would be just a guess. [665]

Q. Well, did General Electric then make any arrangements with Mr. Potter in connection with manufacturing its two-temperature, two-compartment moist cold refrigerator?

A. Not whe. I was there.

Q. Did Mr. Potter attempt to negotiate with General Electric during your term there between 1930 and 1936? A. Not to my knowledge.

Q. You made the statement, I believe, that no arrangement was made with Potter because of increased costs.

Well, you get the point I am driving at. Is that why you refused to deal with Mr. Potter?

A. No. I think what I said was that it was Mr. Beichler who first called my attention to the development, even before this advertisement, Plaintiff's Quinn Exhibit 9, appeared. He foresaw some trouble for us in the market if any of us did undertake such a negotiation, and so it was just tacitly understood between us.

Q. What do you mean by trouble?

A. Well, as I think I also have stated, if any one of the leading manufacturers had undertaken to produce a machine with moist cold, he would

(Deposition of Theodore K. Quinn.)

have automatically required the rest of us to do it. Any innovation, any major innovation, that any manufacturer would introduce, any leading manufacturer would introduce, would have to be followed by the others. We even had to, as I have already testified, had to [666] add the vegetable pan when they put theirs in because they made so much of it.

Q. Well, now, these covered vegetable pans, however, did prevent dehydration of the vegetables and materials placed in the pans, did they not?

A. Yes, they were just as the name pan indicates; they cost about a dollar.

Q. But they did prevent dehydration?

A. Oh, yes; the things that you would put in there, they prevented it to some extent, just as any covered dish in a refrigerator today will keep it moist.

Q. Well, now, getting back to this Plantiff's Exhibit 3-H, Page 37, showing the two-temperature refrigerator with the two compartments, which you say is moist cold——

The Witness: No——

Q. What did you say?

A. I said with respect to the particular refrigerator in this picture, which is a modern type, that I couldn't identify that myself as to whether it was a moist cold refrigerator or not. It is a two-compartment refrigerator.

Q. And this is their modern refrigerator—General Electric's? A. Yes.

(Deposition of Theodore K. Quinn.)

Q. And they don't have any difficulty about dehydration in those compartments, do they? [667]

A. If it is a moist cold, they wouldn't.

Q. Well, I mean in the modern refrigerators having these two compartments, they do not have any dehydration trouble, do they?

A. My understanding is with respect to the modern type moist cold refrigerators that they don't have that trouble, but of course there are still other refrigerators made that——

Q. Well, do you know?

Mr. Cuningham: Have you finished your answer, Mr. Quinn?

The Witness: Yes.

Q. Do you know what refrigerator is shown on Page 37 of Exhibit 3-H? A. No.

Q. You do know that it is a two-compartment and two-temperature? A. That is right.

Q. But you don't know whether it is moist cold or not?

A. No, I don't know whether it is moist cold or not.

Q. But, in any event, that one is a great success—as you have stated. Is that correct?

A. Well, it is the modern type refrigerator with a double compartment, a big freezing compartment on top quite generally used today. [668]

Q. Yes, and you say it is a great success?

A. Well, I assume that it is a great success because, so far as I know, most of the manufacturers are now supplying them.

(Deposition of Theodore K. Quinn.)

Q. And how long have they been supplying them?

A. Well, it was introduced some time after I got out of the refrigerator business.

Q. That would be sometime between 1936——

A. And today.

Q. That advertisement, or that review, Plaintiff's Exhibit 3-H, is——

A. A publication dated September, 1952.

Q. Well, now, then your memory doesn't serve you well enough to state when it was between 1936 and 1952—that is a span of quite a few years—when the General Electric Company came out with its two-temperature, two-compartment moist cold arrangement?

A. It isn't just a question of memory. I don't think I ever knew the exact time. After I left the company in 1936, when my interests naturally were in other things——

Q. Did you know how the refrigerator to which we have been referring in Plaintiff's Exhibit 3-H, Page 37, operates?

Mr. Cuningham: Is that on the right-hand or the left-hand side?

Mr. Byron: Right-hand side. [669]

A. The modern one, no.

Q. You don't know the theory about the operation at all?

A. No. This is all after my time.

Q. You have no recollection whether or not Mr.

(Deposition of Theodore K. Quinn.)

Potter tried to deal with the General Electric Company in having them manufacture the so-called Potter type of refrigerator?

A. No, I do not, and being in charge I should have known, and I would have known, presumably, if he had made any approaches to us.

Q. Your opinion is that he did not approach the General Electric Company?

A. So far as I know, as I recall, I don't know of his ever having approached us. If he did, I just don't remember it.

Q. Now you have referred to the large research organization at General Electric Company, who for fifteen years had been developing a commercial type of refrigerator. Will you please describe that commercial type of refrigerator?

A. The machine to which I referred—I don't believe I spoke of it as a large research organization—but what we did in fact have one or or two engineers working in a factory organization in Fort Wayne, producing the old Audiffron type—producing a machine for commercial purposes only. It was a huge machine and capable of making the equivalent of tons of ice, and with the high side in a bronze ball, and the low side on a similar ball, in horizontal position, [679] running from a belt in the center, and it was a clumsy device, and I don't suppose that altogether there were ever more than a few hundred, if that many, sold. But the mechanism was sealed. It had that innovation.

Q. Well, did it have a cabinet?

(Deposition of Theodore K. Quinn.)

A. No cabinet.

Q. It was just two balls, you say?

A. That is right.

Q. What was in the balls?

A. Well—just comparable—one was a compressor and the other the evaporator, the high side and the low side. One of them did your pumping and the other end got cold, and then you ran the cold end in a brine of water, and whatever you wanted refrigerated, you put into that brine.

Q. And what did they put in the brine?

A. Well, I don't remember very much what it was used for, it amounted to so little, but I don't remember the commercial use.

Q. You just don't remember it very clearly?

A. I don't remember it clearly. It never amounted to very much.

Q. Well, now, the General Electric Company was licensed to manufacture that commercial type, is that right?

A. Actually, General Electric made that machine under an arrangement, whether it was a license or not, I don't recall, [671] from the Audiffron, and our interest in it, of course, in the beginning was that it could develop into something, and it was the adaptation of that principle to the domestic machine that was the forerunner of the modern type sealed machine.

Q. Now, what refrigerator did General Electric make just before the Monitor type? You have re-

(Deposition of Theodore K. Quinn.)

ferred to a wooden box. Will you please describe that?

A. Yes. General Electric was not in the refrigerator business except for this machine we were making under an arrangement with Audiffron, the commercial machine. General Electric then entered the business about a year and a half or two years before I got into it by making an adaptation of that principle—that is, the sealed mechanism in a domestic refrigerator.

Q. And that would be in about 1928?

A. I should say the first ones that they made were probably in 1925 and 1926, and then the business amounted to very little. I think in those two years, they sold about 1200 machines of the domestic type. Then we decided to refine it, and develop it further. We got a white cabinet. We eliminated some of the objectionable superficial elements of the old machine and came out with something that the housewife found acceptable, with which I think most people are familiar now.

Q. That was the Monitor type? [672]

A. Yes.

Q. What type of coils did you have on that one that preceded the Monitor?

A. Well, that was the same—it was the identical principle. The principle was the same. It was an evaporator.

Q. Well, now, did that evaporator, the coils, have fins on it?

A. The compressor had fins on it. That was one

(Deposition of Theodore K. Quinn.)

of the objectionable features from the appearance standpoint which we eliminated.

Q. What were the purposes for having those fins?

A. Well, simply that you had a larger surface and exposed to the air, and therefore the heat would be dissipated faster, but we found that while there was a point of efficiency there, it was very small in comparison with the disadvantage of its appearance, and the fact that it was difficult to keep clean.

Q. Well, of course, back there you say in 1925 or 1926 the fins were used for cooling surfaces, for increasing the cooling surfaces, and that well-known at that time—the function of fins——

Q. That principle was known a long time before that?

A. Well, I should think it would be obvious almost. Yes, the bigger the surface, the easier the contact with the air. [673]

Q. There is a quotation on Page 116——"

The Court: Wait a minute. Strike that

Mr. Lucas: I beg your pardon.

(Discussion off the record.)

Mr. Byron: I would say that we now go to Page 50, to the bottom of the page.

Mr. Cuningham: Of course, if your Honor please, it is Mr. Byron's cross, and I think it is all properly in.

The Court: You think what?

Mr. Cuningham: I have no objection to this.

(Deposition of Theodore K. Quinn.)

this part we are skipping now; I have no objection to it. I would like to have it in.

The Court: Yes, but it relates to matters which I found were largely improper on your direct examination.

Mr. Cuningham: I beg your pardon. I thought your Honor was reserving on that.

The Court: No, this relates specifically to the matters which I ordered deleted from the deposition. I do not think there is anything on Page 50 which has relevance.

Mr. Byron: That is correct.

The Court: I do not think there is anything on Page 51 which has relevance, or 52 which has relevance, or 53 which has relevance. [674]

Mr. Byron: To the middle of page 54.

The Court: There is nothing on page 54 that I can see of any relevancy to this case. At the bottom of page 56 seems to be the first question that has any relevancy, and I don't know for how long it is relevant.

Mr. Maguire: Did your Honor say the bottom or the top?

The Court: Bottom of page 56. I think that is the first time that there is anything of any relevancy. Do you want to start there?

Mr. Lucas: "Q. You have been testifying about the so-called Potter refrigerator—I am not using the other patentee's name because Potter, apparently, bought out the interest of the other fellow—so I just refer to it as the Potter patent. Will you

(Deposition of Theodore K. Quinn.)

please describe that so-called Potter refrigerator at the time that it first came to your attention?

A. As I told you, I am not a technical man. I was only the executive and I can tell you only what the effect was and I couldn't successfully go into the detail of the mechanism at all.

Q. Well, there is not much detail. It had a cabinet, didn't it?

Mr. Cuningham: I object to that.

Mr. Byron: Let us find out what the witness doesn't know. [675]

Mr. Cuningham: He said he doesn't know.

Q. (By Mr. Byron): It had a cabinet, did it not? A. Yes.

Q. And it had a cooling compartment in which the general line of foods were placed?

A. Yes."

The Court: I might say that in accordance with the objection of Mr. Cuningham, it's obvious that Mr. Quinn is not qualified to make an answer on the technical questions which were propounded to him, and I think that I will sustain Mr. Cuningham's objection to this whole line of interrogation because he was never offered as an expert on the patent or an expert—or refrigeration expert. He is just——

Mr. Cuningham: Thank you.

The Court: There are other questions to compare that with the Anderson patent. He doesn't know anything about patents.

(Deposition of Theodore K. Quinn.)

Mr. Cuningham: Does that bring us to page 68, your Honor?

Mr. Byron: I think it does.

The Court: I am just concerned about one thing, and that is on some of the direct examination he has apparently made a judgment on the Potter patent and I am going to instruct the jury to disregard that reference and any judgment he made because it's obvious that Mr. Quinn was the head of the [676] General Electric Refrigerator Department, but he is not qualified by training or experience to know whether a company has a valid or invalid patent. He can't read a patent, and he is not an engineer either, so the testimony that has been introduced concerning the state of the art, what companies were doing at that particular time—am I correct, Mr. Cuningham?

Mr. Cuningham: Yes, sir. I think he had certain other very desirable qualifications which entitled him to speak as a very important business executive at this critical time in the refrigeration industry.

The Court: Yes. But there is no contention that because——

Mr. Cuningham: He was a lawyer, he was not an engineer, and he was not offered as an expert in patent matters.

The Court: Yes. In other words, even though the companies might not have used the principles of the Potter patent, that doesn't mean that the Potter patent was a valid patent.

(Deposition of Theodore K. Quinn.)

Mr. Cuningham: No, sir, I don't think anything Mr. Quinn could say would have any special weight on the patent.

Mr. Byron: Of course, the things that bother me that he talked about was all this talk about these moist cold features and all the other features which he regarded as a great thing and revolutionary, and now when I try to ask him a few things about it he knows nothing. [677]

The Court: Well, now, wait a minute. We are deleting that, Mr. Byron, and I think we can save the argument for a later time.

I think I can make this one thing clear, though, that the mere fact that an item is not used on the market at a particular time doesn t mean that the invention has not been anticipated or somebody might have a patent covering that precise innovation, if it is an innovation, and with that we are going to let Mr. Byron go ahead with the question in the middle of page 65. Is that the place you are talking about, Mr. Cuningham?

Mr. Cuningham: Let me look at that, sir. No, sir. I thought it was 68.

The Court: Oh, 68.

Mr. Cuningham: "By Mr. Byron," at the top of page 68.

The Court: Well, that's the same thing. If I have stricken that other testimony I should strike this because——

Mr. Cuningham: Well, your Honor, I don't think so. This is as to what the General Electric

(Deposition of Theodore K. Quinn.)

Company used in their refrigerators, insulation. It has nothing to do with the patent.

The Court: All right. Go ahead and read it.

Mr. Lucas: "Q. I assume that you know this, that the General Electric Company in making its refrigerators of all types, used the desirable amount of insulation, depending upon [678] the temperature they wanted inside the box; is that correct?

A. Yes, although you might get the same effect with a compressor and less insulation. What you are after is a balance.

Q. Yes, that is right. Well, now, the question of insulation of a refrigerator, the walls and the partitions, is pretty much like the question of blankets on your bed. There is a temperature difference between the inside and the outside when the body is on the inside, and if you want to prevent the transference of the heat to the cold or the cold to the heat, you just throw on another blanket——"

Mr. Cuningham: I think the answer is at the bottom of page 69.

The Court: Just before the redirect.

Mr. Cuningham: Yes.

The Crier: "I think I know a great deal about refrigerators, and a lot about the business. I did, but I am not an engineer or technical man. That is my only reservation."

(Deposition of Theodore K. Quinn.)

Redirect Examination

By Mr. Cuningham:

Q. Mr. Quinn, you do know about the marketing of refrigerators, do you not? A. Yes.

Q. You had a slight experience as head of the G.E. refrigeration [679] business? A. Yes.

Q. If you were not the largest during that period, you became the largest, and certainly became the largest in volume of sales?

A. Yes, we reached the tops. We alternated with Frigidaire for the leadership.

Q. Based on your experience as a merchandiser of refrigerators, would you say that a two-temperature box, such as that illustrated in the Potter patent, reissue patent in suit, would command a substantially higher price to the purchasing public than the ordinary conventional box without the moist cold feature?"

Mr. Byron: I object to that. He doesn't know.

The Court: The objection is sustained for the reason given in your objection. You want to state your objection as you did then? It's all right with me.

I might say, Mr. Quinn has indicated that he didn't know anything about pricing, that he got his figures from somebody else, and so he is not qualified to give this answer, and I sustain the objection.

Mr. Cuningham: "Q. Is it now a standard article? A. Yes.

(Deposition of Theodore K. Quinn.)

Q. And so far as you know, is that standard article of commerce founded by the Potter organizations?" [680]

Mr. Byron: Well, there, again he doesn't know anything about the mechanism, he says, and is not qualified to speak. So why now about the patent?

The Court: Objection sustained.

Mr. Cuningham: "Q. Has it been your experience, as a merchandiser, that frequently the cost of an article has little or nothing to do with its sales price?

A. It is a factor in the sales price, but not the only factor.

Q. Not a controlling factor, frequently; is that correct?

A. Sometimes a controlling factor. I have known it not to be.

Q. Sometimes not a controlling factor?

A. Sometimes not.

Q. In an effort to help Mr. Byron out, and although I realize this is after your dates with the G.E. Company, would you accept the large printed date of 1939 on the cover of this GE booklet which I now show you as being approximately accurate as to time?"

Mr. Cuningham: And that is Plaintiff's Exhibit 3-K.

The Crier: "A. Yes, any salespiece like that would have to be accurate."

Mr. Cuningham: I offer that in evidence.

(Deposition of Theodore K. Quinn.)

The Court: Any objection?

Mr. Byron: Well, I don't know what relevancy, pertinency it has. I object, yes. [681]

The Court: I don't know its relevancy, either. The man has testified that after he left the General Electric in 1936 he had little or no contact and lost all interest in the product.

Mr. Maguire: Of course, your Honor, if I may say this: This is certainly an official document put out by one of the leaders in the industry, and it's not necessary that he knew the basis of it, the fact that they had made declarations of fact about their own business at that time as part of the industry.

The Court: This is 1939.

Mr. Cuningham: It's a publication of the G.E. It's in every public library, and they have that type of thing.

The Court: I am not concerned and I don't think Mr. Byron is about the authenticity of the document. He is not complaining about the authenticity of the document. Obviously it was put out by the General Electric Company.

Mr. Cuningham: Well, your Honor feels——

The Court: It doesn't need any further verification.

Mr. Cuningham: If you will notice a little further on he refers to pages 16 and 17 of the—I think it's necessary to complete the testimony.

The Court: Well, go ahead. It's admitted.

(The document, being pamphlet of General Electric Company, 1939, was received [682] in evidence as Plaintiff's Exhibit 3-K.)

(Deposition of Theodore K. Quinn.)

Mr. Cuningham: "Q. I call your attention to pages 16 and 17, either one or both of them, and ask you if you recognize that two-unit double compartment box? A. Oh, yes.

Q. Well, now, is that a product of the General Electric Company, to your knowledge?

A. Only as I see it announced here in this pamphlet.

Q. In about 1939?

A. The date here is 1939.

Q. Do you recall any earlier two-compartment box that was actually marketed by G.E.?

A. None except the one I mentioned awhile ago, where we made a stab at it and abandoned it.

Q. That was a flop? A. Yes.

Q. Can you look at pages 16 and 17 and tell me whether those refrigerators are dry cold as distinguished from moist cold in 1939?"

Mr. Byron: He doesn't know anything about it and doesn't know.

The Court: Well, I am going to strike all of this testimony. It's been obvious from this statement.

Mr. Cuningham: All right.

The Court: It's obvious that he doesn't know any more [683] than the general public, anyone looking at that document.

Mr. Cuningham: I would be glad to withdraw that.

The Court: And the rest of that page——

Mr. Cuningham: Yes.

The Court: ——is certainly immaterial.

(Deposition of Theodore K. Quinn.)

Mr. Byron: Now, I wonder if your Honor wishes to strike the admission of the exhibit?

Mr. Cuningham: I will withdraw the exhibit. I am sorry I offered it.

The Court: All right.

Mr. Cuningham: Beginning of the testimony on 73.

"Q. Now for the purposes of clarifying the testimony you gave on cross, or attempting to do so, I direct your attention to the illustration at the right-hand top of page 39 of Plaintiff's Quinn Exhibit" 3-H, "and ask you whether or not that is the wooden box to which you referred?

A. Yes, that was the one that preceded my entry into the business.

Q. That is the one that you referred to in response to questions by Mr. Byron?

A. Yes. You see, they had the fins on the coils up here, or the compressor. It was an ugly old thing, wasn't it?

Q. Can you give us any idea of what the ratio of cost to price would be with respect to these moist cold boxes"——

Mr. Byron: I object, because he said he didn't know [684] anything about it.

The Court: Well, he says that he doesn't know anything about it in the answer.

Mr. Cuningham: We just have it the way it is there.

The Court: Well, Mr. Cuningham, here is a man

(Deposition of Theodore K. Quinn.)

who demonstrates in the question that is not qualified to give an answer to the question, and I am going to strike both the question and the answer.

Mr. Cuningham: Has your Honor ruled on that?

The Court: Yes.

Mr. Cuningham: You don't want to hear further——

The Court: No, I don't want to hear any further from a man that frankly states he doesn't know.

Mr. Cuningham: That is all.

Mr. Lucas:

"Recross-Examination

By Mr. Byron:

Q. You stated, I think, that you regarded this so-called Potter invention as revolutionary. In what respect is it revolutionary?

A. Well, my comment about that, Mr. Byron, was based on—well, you remember I told you Mr. Beichler, of Frigidaire, arranged a special meeting with me in Cleveland even before this came out. He knew about it, and this was to find out what we knew about it, and what we were going to do about it, and he was quite disturbed about it, more so than I was, who [685] knew nothing about it at that time, and the attempts we had been making to get moist cold without success. It was and still is in the ordinary old-type refrigerator, something of a device to the housewife to put her food in exposed in a refrigerator and then have it dry out and have the moisture collect on top of the evaporator and all

(Deposition of Theodore K. Quinn.)

around it. That is so objectionable, in fact, that the Norge Company, for one, subsequently made a great deal of a device that automatically defrosted the evaporator at night, so that you wouldn't be bothered with it during the day.

We had to go to the housewife and give her special instructions for defrosting the refrigerator. On occasion, and periodically, she had to take all the stuff out of the refrigerator and defrost it. If there was such a thing as a moist cold that would keep all the food without depriving it of the moisture, a piece of celery or lettuce, as you know, looks pretty sick after it has been in a dry cold refrigerator for awhile, so it would be a very great advantage. Therefore, I don't know that I used the word 'revolutionary' advisedly, but it certainly was a major development, I would say.

Q. Would you say that every company making refrigerators having a two-compartment feature, two temperatures, and the moist cold compartments infringe?

Mr. Cuningham: That is objected to as entirely incompetent. [686]

A. I don't know. I am not a patent lawyer.

Q. You say that is the invention. If you say that is the invention and all these other companies are using that construction, would you say that they are infringing?

A. I wouldn't undertake to answer that."

The Court: Go ahead.

(Deposition of Theodore K. Quinn.)

The Crier: "A. (Continued): I think it would be presumptuous on my part.

Q. You wouldn't know whether or not this so-called Potter invention was a revolutionary one?

A. It would purely be a layman's notion. If you ask me that, as non-technically, I would say yes, but I don't know that that means anything on a technical point of infringement. I don't know whether somebody else didn't do something like it before, as you seem to indicate. I am not familiar with it, but I never heard of it nor did the industry, until this Mr. Potter came out with his. If we had known about it beforehand, you would have seen some evidence of it, I dare say, in our early construction, if we could have made it, again, at lowest cost.

Q. Is it possible that the literature might describe such a refrigerator moist cold top, with two compartments and General Electric could not know about that literature?

A. At the time I was there—oh, if there was anything out, we would know about it. [687]

Mr. Cuningham: I object to that.

Q. And if there was a disclosure in earlier patents, would you have known it?

Mr. Cuningham: Same objection.

A. I think we wouldn't have gone ahead without knowledge of anything before that. So far as I knew, we had a clear field when we started.

Q. A clear field to what?

A. To proceed in the refrigerator business when

(Deposition of Theodore K. Quinn.)

we started. I know we did. I got that advice from our Patent Department.

Q. Yes, but you have missed the point. I asked this question. If there was an earlier patent or an earlier publication——

Mr. Cuningham: I object to the form of the question.

Q. (Continued): ——describing a two-temperature, two-compartment refrigerator of moist cold type, would you have known of it?

A. If there had been, I should think we would have. Now, of course, we mustn't assume omniscience, that we knew everything. But we did make it our business to try to know everything about the refrigerator business.

Mr. Byron: That is all."

"Redirect Examination

By Mr. Cuningham:

Q. Now I would like to ask you whether you agree with this statement which appeared in Air-Conditioning and Refrigeration [688] News, December 21, 1938, on page 6.

Mr. Byron: What is the name?

Mr. Cuningham: Air-Conditioning and Refrigeration News.

Q. (Continued): And now I quote: 'One of the industry's best-known engineers predicts that in the next two or three years, no household refrigerator will be modern or acceptable if it does not provide

(Deposition of Theodore K. Quinn.)

for the keeping of frozen food and does not provide for the high humidity in the regular food compartment.' Do you share that opinion?

A. Well, he sounds like a prophet in view of subsequent developments."

The Court: Well, that is the end of the testimony.

Ladies and gentlemen, you have now heard the testimony of Mr. Quinn. It is 2:30. Take a short recess before we take up another deposition. Is that what we are going to have, Mr. Cuningham?

Mr. Cuningham: Yes, your Honor; and it's the deposition of Mr. Quinn's associate and successor at G.E., Mr. Zimmerman.

The Court: All right. I think we had better take a short recess now.

Mr. Cuningham: May I make a record on these?

(Whereupon the jury was excused for the midafternoon recess, and the following proceedings were held out of the presence of the jury:) [689]

The Court: Go ahead.

Mr. Cuningham: I simply wanted to make a record on these exhibits that were left out due to my inability to get back on time.

Mr. Maguire: Those were the ones that we postponed while I was reading, your Honor.

Mr. Cuningham: The first one is Plaintiff's 3-F, and it will help to identify it. That was marked Quinn Exhibit 6.

The Court: Well, I might not have to pass on it. What about those two exhibits, Mr. Byron?

Mr. Cuningham: May I get the last one in?

The Court: All right.

Mr. Cuningham: The last one here is identified as 3-G, and it might help to note that that is Quinn Exhibit 7. They have copies.

The Court: Take a recess and Mr. Byron will tell us in a few minutes about them.

(Recess.) [690]

The Court: The Zimmerman deposition was taken in New York City on July 19, 1955; is that right?

Mr. Cuningham: I think that is right, your Honor; in New York at the same time and place that the Quinn deposition was taken.

Your Honor, before getting into this I would like to offer to renew the offer of the two Quinn exhibits 3-F and 3-G.

Mr. Ramsey: We object to these on the ground of materiality. They only discuss the hydrators or pans, and those are admittedly old in the specification of their own patent, and that is the thing they say they are trying to overcome.

Mr. Cuningham: They are illustrative of the testimony, your Honor.

Mr. Ramsey: But it is old art.

Mr. Cuningham: That is right.

Mr. Maguire: It was art that existed at the time of the patent.

The Court: They have already testified to that,

and I am going to admit them as illustrative of the testimony of Mr. Quinn. [691]

(Thereupon the deposition of Paul B. Zimmerman, a witness called to testify in behalf of Plaintiff on July 19, 1955, at the offices of Monitor Equipment Company, 640 West 249th Street, New York, N. Y., was read into the record, with Mr. Cuningham reading the questions and Mr. Harold Hart, the Court Crier, reading the answers as follows:)

DEPOSITION OF PAUL B. ZIMMERMAN

"Q. Mr. Zimmerman, do you appear in this case in response to this subpoena? A. I do.

Q. What is your name, residence and occupation?

A. Paul B. Zimmerman, 1332 Midland Avenue, Bronxville, New York. My occupation?

Q. Your present occupation.

A. Executive Vice-President of the Monitor Equipment Corporation, and Vice-President of the T. K. Quinn Management Company.

Q. Have you ever had any experience in the household refrigeration business, Mr. Zimmerman?

A. Yes; both with General Electric Corporation and with the Norge Division of the Borg Warner Company, and more recently in the Monitor Equipment Corporation.

Q. Was this experience, as just stated by you, in the order of your experience chronologically?

A. Yes. [692]

(Deposition of Paul B. Zimmerman.)

Q. Will you give me just a thumbnail sketch of your experience with the General Electric Company and give me dates if you can?

A. Well, I was first associated with General Electric Company as advertising manager of the Lamp Department and then became sales manager of the newly formed Refrigeration Department in 1927, was there as sales manager, and in about 1932 I became general manager of the Refrigeration Department and held that title until I left the General Electric Company in 1937.

Q. And where did you go in 1937 from the General Electric Company?

A. To the Norge Division of the Borg Warner Company at Detroit, Michigan.

Q. And what were your duties there, Mr. Zimmerman?

A. I was Vice-President in charge of sales.

Q. Sales of what products?

A. Of all large products, which were refrigerators and other major appliances.

Q. And how long did you stay at Norge?

A. About two years.

Q. 1939, is that about right? A. Yes.

Q. And will you just bring us rapidly up to date? You left Norge in 1939? [693]

A. I left Norge and set up an advertising and merchandising business and was engaged in that for about two years, and then during the war period I was associated with the Chrysler Corporation as Vice-President of their Air-Temp Division, which

(Deposition of Paul B. Zimmerman.)

manufactured refrigeration and air-conditioning equipment.

In 1945 I again became associated with Mr. Quinn in organizing the Monitor Equipment Corporation.

Q. And by 'again became associated,' you mean that you were associated with Mr. Quinn at the General Electric Company?

A. That is right.

Q. Have you read the testimony that Mr. Quinn gave in this case, or a copy of it which I turned over to you?

A. Yes, I have read that testimony.

Q. The testimony being dated April 19, 1955. Now, Mr. Zimmerman, was 1927 your first experience with the household refrigeration business?

A. It was, yes.

Q. In your reading of the testimony do you accept the statements of Mr. Quinn as accurate with respect to that early period?

A. Yes, I accept them.

Mr. Byron: I object to that. That is jumping over a lot of territory without going into the necessary testimony [694] himself. I object to that line.

Q. (By Mr. Cuningham): I will ask you this: When did you read this testimony, Mr. Zimmerman, this copy that I have in front of me?

A. This past week end.

Q. In reading it, did you note anything that you would be unwilling to accept in the way of testimony of Mr. Quinn?

(Deposition of Paul B. Zimmerman.)

A. No, I would be willing to accept that."

(Discussion off the record.)

"Q. Mr. Zimmerman, will you tell us about this early business in household refrigerators, starting with your competition with the old-fashioned ice-box? That was your competition in 1927, wasn't it?

A. That's right.

Q. Did you find any real competitive activities with the ice companies and vested interests when you began with mechanical refrigerators for the G.E. Company?

A. Yes, we did. We found that less than 14 per cent of the people used ice even the year around, and as a result it was looked upon simply as a means of keeping food from spoiling during the summer season, so we soon found that we had to develop our own market if we were to have a refrigerator used the year around, and so much of our activity in the early days was spent on selling the public the fact that refrigeration was good the year around and [695] it was always summertime in the kitchen. Later the campaign, of course, on the part of the ice companies took the form whereby they endeavored to sell people the fact that they had moisture control, and the refrigerator folks who had up to that time featured mostly their mechanical units then started more and more to sell the refrigerator as a device that would regulate temperature, and out of that came a campaign later, in the food preservation campaign, in which

(Deposition of Paul B. Zimmerman.)

the refrigerator industry lined up on one side for temperature control and the ice industry on the other side for moisture control.

Q. And those were the lines upon which the battle was fought for a good many years, is that correct? A. That's right.

Q. What was the Food Preservation Council of America?

A. That was a non-profit organization which was supported by contributions from the refrigerator manufacturers and from the light and power companies, and we endeavored—and I was the first president of that organization—to get the industry to broaden the market for refrigeration rather than divide it up among ourselves by each one trying to sell the excellence of their product. So we were able to get schools and educational institutions to take some interest in the subject of food refrigeration, and since it was simply to get some one thought across as against a [696] broad education, we selected the device of a critical temperature, and we were able to get the Department of Agriculture to concur to a point that we all agreed that we should sell the thought that food preservation could be maintained if the refrigerator temperatures were 50 degrees or below. We had thermometers made and a lot of banners and special literature, all on the subject that below 50 lies safety for food preservation. The refrigerator manufacturers so hammered that one thought that it became pretty well accepted, and the campaign of the ice

(Deposition of Paul B. Zimmerman.)

people, moisture control, was less in evidence. Since the art was so new anyhow, the public accepted this new device, at least as far as the utilities could influence them, and it was considered over-all a success because the market broadened out and our business went ahead fast.

Q. As I understand it, you countered this—you countered this campaign or sales pitch of the ice companies, the theme of which was humidity control and lack of drying out of foods, with your equally valid argument and pitch about the maintenance of low temperatures throughout the day and throughout the season, and you seem to have done a good job in this missionary work with the market, is that correct? Was it a fact that this problem of humidity control was really a problem with the electric refrigeration?

A. Oh, definitely so. We had first a limited capacity [697] that bothered us and therefore did not have the means of even developing more low equipment. Therefore we were straining, all of us as manufacturers, to maintain this 50 degrees that we considered the safety point, and as a result we had such a dry cold that many people found it to their advantage to dry their matches and their crackers there. That seemed to have some temporary interest, but later it boomeranged a bit when they realized that fresh vegetables and many other things that they stored in the refrigerator were better served if they did not have such a dry cold.

(Deposition of Paul B. Zimmerman.)

Q. I show you what has heretofore been marked Plaintiff's Exhibit 3-F. It is an advertisement, I believe, of Frigidaire of a Hydrator pan. State what that is, if you know.

A. This is an advertisement of the Frigidaire Corporation in which they feature a Hydrator. A hydrator was simply a vegetable pan with a cover in which the householders would store their fresh vegetables, add a bit of moisture, cover the pan, and then keep it in the refrigerator and in that way was able to have moisture for fresh vegetables to keep them from drying.

This big offer of Frigidaire disturbed us greatly, and, finding there was nothing patented on this Hydrator, we immediately equipped all our refrigerators with a so-called vegetable pan and endeavored to give an answer to [698] people that wanted moisture added to a refrigerator, that this pan could be used.

Q. Would it be accurate to characterize that as just a covered pan or covered dish?

A. Oh, yes. It was a very simple pan that was available in all housewares departments, so it was nothing of a new design to us. It was simply a housewares article we purchased and furnished as an accessory.

Q. You would characterize it as fundamental engineering? I am asking Mr. Zimmerman if he would accept that term as appropriate, namely, fundamental engineering in connection with the devising of a covered dish for a refrigerator.

(Deposition of Paul B. Zimmerman.)

A. Well, in answer, there is certainly nothing fundamental or new to the art, as it was a simple vegetable pan that was available on the open market in the housewares departments of all department stores.

Q. Mr. Zimmerman, were there any further efforts at humidity control that you can think of during this early period, in the 20's?

A. Yes, we made several. One was a two-temperature refrigerator so-called, and that was obtained by taking two of our single-door Monitor top refrigerators and putting them together by bands, taking off the center legs. In that way it made one large refrigerator with two units at the top. We then showed the customer that they could have a [699] two-temperature refrigerator with many other advantages. We got the two temperatures by turning one high and one low, and we then featured the fact that this double-door large refrigerator not only had two temperatures, but was so constructed that if they later wanted to divide it and the children moved away and wanted to take their part, we would furnish extra legs and two refrigerators could be employed.

Q. How successful was that effort in the General Electric Company?

A. While it answered a certain need, and particularly on the part of our trade that wanted to answer all the competition, it wasn't commercially successful. It was quite expensive. It was nearly

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the cost of two refrigerators, and a rather limited number were sold. But it was a good promotional feature.

Q. You left the General Electric Company in 1937; that is, a little later than Mr. Quinn?

A. That's right.

Q. I show you what has heretofore been marked Plaintiff's Exhibit 3-H. I guess the whole exhibit was marked, but I direct your attention to an article beginning on Page 37 of the General Electric Review for September, 1952, entitled 'Making It Safe to Be Hungry.' Are you familiar with that historical write-up of the G.E. refrigerator business? A. Yes, sir; I am. [700]

Q. Have you read it? A. Yes.

Q. Is it generally accurate as far as you know?

A. Yes, it is.

Q. I show you also a document heretofore marked Plaintiff's Exhibit 3-K——"

Mr. Cuningham: I shall omit that, your Honor. That relates to something not in evidence.

The Court: Very well.

Mr. Cuningham: I would start in at the first question on 96.

The Court: Very well.

"Q. What is that?

A. This is a modern two-door General Electric refrigerator with the unit at the bottom and not at the top as they were in my day.

Q. Is that a dry cold refrigerator? With respect to its being dry or moist cold.

(Deposition of Paul B. Zimmerman.)

A. In our catalogue it would be considered a dry cold refrigerator.

Q. The same is true, I think, of everything in this catalogue, isn't it? You might glance through it.

A. Yes, all these models we would consider dry cold with a [701] single evaporator.

Q. Now, Mr. Zimmerman, I show you another document which is marked Plaintiff's Exhibit 3-U and ask you if you know what that 20-page advertisement is and whether you ever saw it before?

A. Yes, I am familiar with it. It was a 20-page announcement of the Tricold method of balanced humidity in refrigerators.

Q. Was that as far as you know the first two-compartment household refrigerator that made an effort at moisture control in the fresh food compartment?

A. It was the only one that I was familiar with, yes.

Q. Did other companies later—you notice that is dated 1932—if you know, come out with similar products as their de luxe line of boxes?

A. Yes, later others did.

Q. Did most others do it, if you know?

A. Well, immediately following that I think there were very few, but later, of course, in this most recent period it is a 'must' with all refrigerator companies.

Q. What was the first other company than this

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Tricold outfit, as you recall, coming out with a two-temperature refrigerator?

A. I think it was Stewart-Warner.

Q. Can you give us your idea of when that came out? [702] I imagine that is a hard question, but as close as you can.

A. Well, it was in the early '30's. I would suspect it was about 1933 or 1934.

Q. At the time in 1933, was it, when this announcement came out, did you recall any stir in refrigeration circles regarding this new development?

A. Well, our largest competitor seemed to be quite disturbed. That was Frigidaire, and, as we have mentioned here, they had then brought out the Hydrator, and that seemed a simple answer to this system and enough so that many of the customers accepted it. We in General Electric immediately took it because there was no prohibition on its use and it didn't require any change in design of our mechanism. I don't know as you appreciate that in those days it was a great task to keep the mechanism good so that service wasn't too expensive, and we, and I think most other manufacturers, were not willing to add anything to the system that might make it more complicated.

Q. You still were mindful, were you not, of your competition with the old ice people at that stage?

A. Oh, yes; they were large and effective, and, of course, had the large share of the market at that time so their story had a telling effect.

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Q. What proportion of your duties and responsibilities during your period of ten years, I guess, approximately [703], with the General Electric——

A. Do you mean just in the refrigeration business?

Q. I was thinking of just the refrigeration business. How long were you with General Electric in all? A. Twenty-five years.

Q. But in 1927 you took on the responsibility of the refrigeration end? A. Yes.

Q. And then, as I understood you, a change occurred in your position there in 1932 and you became General Manager instead of Sales Manager?

A. That's right.

Q. Is that for just refrigeration or for all appliances?

A. That was for the refrigeration department, but we shortly after that took over and developed other major appliances that we added to the department, and it was then known as the Specialty Appliance Department.

Q. Then you stayed on as General Manager until 1937? A. That's right.

Q. During that ten-year period from 1927 to 1938, was the household refrigeration business your principal concern?

A. Yes, that was our major responsibility.

Q. That was the bulk of the business, was it not? A. Yes.

Q. When you left in 1937 to join Borg Warner

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in the Norge [704] Division, did you still have responsibility as Vice-President for the household refrigeration of that division?

A. That's right, yes.

Q. What did you do there with respect to humidity control, if anything?

A. Practically nothing. We had a machine that was quite similar to much of the competition, and we did nothing to add to the art. We did try to make a low-cost product so that we could have a share of that price market.

Q. You were very cost-conscious and made as few changes as you could, is that correct?

A. That was our big job, to get the cost down.

Q. Were you aware of this so-called Tricold—you referred to it as the Potter?

A. Yes, at that time it was being discussed of course even more.

Q. Were you acquainted with any of the individuals in the Tricold organization?

A. Only Mr. Potter, and that was a very limited acquaintanceship because I had only met him at one or two of the refrigerator conventions.

Q. Did you have any acquaintance in the Stewart-Warner organization during this period in the '30's?

A. I believe D'Olive was their refrigerator manager at that time. [705]

Q. Was that Charles R. D'Olive?

A. Yes, Charles R. D'Olive. We were fairly

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well acquainted with him because he attended all the refrigeration meetings.

Q. Did he in any way indicate an awareness of this Potter development to you at any time?

A. Yes; he was more of a technical man than many of us that were in sales work, and on a number of occasions I recall he pointed out that this moisture control had become a bigger factor than the other features that we had felt were so dominant in refrigeration.

Q. Such as maintenance of temperature, and so forth?

A. Maintenance of temperature. And the biggest factor of all, of course, was to have a mechanism that would operate for a number of years free of service.

Q. Did he and others in the industry like him

gest factor of all, of course, was to have a mechanism that would operate for a number of years free

A. Well, they were not large manufacturers, and, as I recall, they contributed very little, but we, of course, felt we were remiss in not featuring the salient points that some day must be effective with consumers, but, as I explained to you before, we had a different job, we thought, at that time to do, and it therefore became the major, and this, if it was there at all, was a minor.

Q. Mr. Zimmerman, how much money have you been paid for [706] testifying in this case, or how much money do you expect to get for testifying in this case?

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A. I have been paid nothing, and I expect nothing; in fact, would not accept it.

Q. I have not even offered you the $2 witness fee, have I?

A. No, sir; I did not know there was such a fee.

Mr. Cuningham: There is. I probably should offer it to you. Your witness, Mr. Byron."

"Cross-Examination

By Mr. Byron:

Q. Mr. Zimmerman, do I understand correctly from your last few answers that General Electric and some of the larger companies and the Stewart-Warner Company, which you say was a small company in this field, regarded this question of moisture control as a minor matter?

A. I don't know that we could say that they considered it a minor matter, but keep in mind I am speaking as a salesman, and we had to take the products as they were given to us by engineering and make the most of them. It was for that reason, taking the products as they were per se, that we took the features that we felt would have opportunity for public exploitation. Men like D'Olive had pointed out that here would be a great one to add, but we did not have it so we minored it, and that is my reason for saying that. We just did not have it. [707]

Q. What was your honest opinion at that time? You say you minored it.

A. During the period of our food preservation

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activity, I honestly felt that we made one great step forward in getting better cabinets and establishing a new standard which the Department of Agriculture and the Health Department helped us with, because they were very poorly constructed. They were leakers, and it was better in many cases if they would leave the door open rather than close it because temperatures were not maintained. So we felt temperature control, until we had better machines and better cabinets, was a major, and we could get across just one thing at a time and therefore we decided to concentrate on this as an industry. I think we accomplished that to the point that the icebox people improved their cabinets, as did the refrigerator people, and it was the first joint effort of the industry. Also, it got us away from some of the campaigns which were very negative. The ice people were inferring at least that a refrigerator with its poisonous gases should not be kept in a home, and the refrigerator folks in turn were, of course, pointing out that there was too much moisture in an icebox and you had a slimy pan underneath. All this was negative. So out of this came what we thought was a constructive move, and it was the first one. We had to have temperature, and therefore anything else would be a further refinement. [708]

Q. You spoke about the General Electric two-temperature refrigerator, that is, the two-in-one of the General Electric Company. I think you did not

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mention the year that that was brought out. Do you know what year that was?

A. I think it was about 1933.

Q. You had in your combined two-in-one refrigerator then one compartment having the temperature below freezing or below zero, is that correct?

A. That was the objective, but we couldn't get it that low so we just turned it as cold as we could. We had an evaporator temperature of 14, and we never got it below that.

Q. Your freezing compartment then was around 14 degrees Fahrenheit? A. That's right.

Q. And at what temperature did you maintain your cooling compartment?

A. The freezing unit is our cooling compartment—or do you mean the whole interior?

Q. You said that you had in effect two refrigerators in one, and I assume that those were two separate compartments as you have testified.

A. Two separate cabinets.

Q. Well, there are two separate compartments, then, is that right? A. That's right. [709]

Q. I am talking about the low temperature in one of those compartments, and you say that low temperature was about 14 degrees Fahrenheit. What was the temperature in the other?

A. The whole compartment couldn't maintain 14 degrees because only the icing unit that was in that compartment had the initial low temperature of 14. Then only to the extent that it influenced

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the cabinet inside or the compartment would you have lower temperature.

Q. Well, did you have two refrigerators, each of which was complete in itself, so that you had a freezing compartment in each of those?

A. That's right.

Mr. Cuningham: A separate freezing compartment.

A. In fact, there wasn't, Mr. Byron, too great a difference because at the top of each of these was a thermostat, and the customer could only change that operation a limited amount. It was done for safety of the machine. What we did get in the left-hand compartment is we let them turn it to the highest point so that we had a higher temperature than we did in the other one and therefore a little better humidity. It was a relative thing, and that was one reason it probably wasn't too successful. The relation of one to the other wasn't too great a difference.

Q. What was the relative humidity?

A. I haven't any idea except that we knew that it was higher [710], and since we had the temperature in there high and didn't endeavor to freeze ice cubes in the icing part of the unit, it came closer to being a moisture compartment that we could at least feature. On the other one, we had it turned down as low as we could, which was about 14 degrees, and there we did the freezing of the ice cubes.

Q. So that in this two-in-one refrigerator that the General Electric Company had, while you did

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have two freezing units, one freezing unit in each compartment, it is only in one of those that you brought the temperature in that freezing zone down to about 14 degrees Fahrenheit?

A. That's right.

Q. And in the other you did not attempt to freeze water and ice cubes? A. That's right.

Q. And therefore the relative humidity in that higher temperature compartment was greater than in the other compartment, is that correct?

A. Yes.

Q. Now, as a matter of fact, did you not measure, determine, the relative humidity in that warmer compartment?

A. I don't believe we ever did because we had developed this pretty much as a sales department product. It wasn't a product of the engineering department, and in fact these machines were put together in the field. They simply took [711] off the center legs and put a band around them and strapped them together as two machines. I confess that the engineers weren't very happy about it as a solution to their problem, but it did give us an answer to those who were demanding a two-temperature or a high and low humidity, a sort of makeshift in other words.

Q. But you did have a higher humidity in the one compartment than you did in the other?

A. To some extent, yes.

Q. Now, as salesmen, to put over that point, didn't you have some foundation for making a

(Deposition of Paul B. Zimmerman.)

statement about your higher humidity and the degree of that humidity backed by a company like General Electric Company with their reputation?

A. Many of the sales stories we had were created by the sales department on nothing other than the test in homes or what we believed. There was no scientific data for much of it.

Q. You were head of the sales organization of refrigerators for General Electric?

A. From the beginning, yes.

Q. You had a conviction about that relative humidity and that warmer compartment, did you not? A. That's right.

Q. What was it?

A. That it would be a nice service to add to refrigeration [712], but we did not have it available at the factory at the time and therefore we sold the features that we had.

Q. Did that keep the food in the warmer compartment moist?

A. Some said yes and some said no. It evidently was not quite as good as using a vegetable pan that was covered with moisture in the pan.

Q. What did you think?

A. I finally agreed with them in this expose. We at least had a different vehicle to use which pleased salesmen. But they found, because of its price and the limited service, that it was not a successful answer. So we went back in a big way to the Hydrator or the vegetable pan as a part of all refrigerators.

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Q. It was because of the price that you went back?

A. The price and the fact that we didn't believe it completed the functions.

Q. You know I am not at all convinced, Mr. Zimmerman, that somebody in your organization didn't know the relative humidity in that warmer compartment of your two-compartment refrigerator.

Mr. Cuningham: I object to that. That is not the testimony. He is not trying to convince you that nobody knew that.

Q. (By Mr. Byron): Well, you as Vice President in charge of Sales, should know the truth about what that relative humidity was because you were the one to begin with who was sponsoring that two-compartment two-temperature affair, is that not [713] correct?

A. I told you that it was a very minor thing because we had not developed a product specifically for that service. We had made a makeshift of a product already available, and it was an experiment, and we have done that with many products.

Q. You have been talking about the Potter refrigerator. Do I understand your position is that the main thing that was emphasized about the so-called Potter refrigerator was the moist cold feature? A. That's right.

Q. That is, keeping the food and air and the cooling compartment moist and cold and preventing the dehydration of the food and air, is that

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correct? A. That's right.

Q. That was the big point that they were putting over, or trying to put over?

A. That is what he did in that expose that I have read."

Mr. Cuningham: Referring to Plaintiff's Exhibit 3-U.

Mr. Lucas: "Q. And the Potter refrigerator accomplished this by providing the cooling coil in the cooling compartment with fins so that the temperature of the surface of the coil and fins would be maintained at about 40 degrees Fahrenheit, is that correct?

A. I am not familiar with the degrees of it. I know that was the general system. [714]

Q. You knew that the Potter refrigerator provided the cooling coils in the cooling compartment with fins to accomplish that result?

A. That is correct.

Q. Now, the air in the cooling compartment as distinguished from the freezing compartment in the so-called Potter refrigerator claimed to have a relatively high moisture content, is that correct?

A. That was their claim, yes, sir.

Q. Now in their patent, in the Bronaugh and Potter patent in suit, they bring out the fact that the air in the cooling compartment has substantially a stable temperature of about 40 degrees Fahrenheit and having a humidity whose relative value is at least 100 per cent at 32 degrees Fahrenheit—under such circumstances, do you know what

(Deposition of Paul B. Zimmerman.)

the humidity of the air in the cooling compartment is when it is at 40 degrees Fahrenheit?

Mr. Cuningham: Objection!

Mr. Byron: I am not going to make it technical. I am just asking him if he knows it.

A. No, I do not.

Q. Well, I will tell you what it is. That air under those circumstances in the cooling department has 74 per cent relative humidity which corresponds to 100 per cent relative humidity at 32 degrees Fahrenheit. That is an established [715] fact, and I am just telling you that for a reason.

Q. Do you know that lettuce, which seems to be one of the criteria here in the wilting or flourishing or keeping fresh and crisp has almost 100 per cent moisture content? Do you know that?

A. No. I know it is very high. Do you mean when it is dry on the stalk?

Q. No, when you put it in the icebox, in the refrigerator. When you buy it and put in the refrigerator it has about 100 per cent——

A. It is generally loaded with ice water when you get it out of the store.

Q. Let's not talk about its being loaded with anything. I am speaking about the lettuce as you purchase it and put in your refrigerator under usual, normal circumstances. The expert demonstrator"——

Mr. Cuningham: Your Honor, if I may interpose here, the reference is obviously to Mrs. Kobernuss who has testified in this room yesterday.

(Deposition of Paul B. Zimmerman.)

Mr. Lucas: ——"The expert demonstrator for the Potter Company says under those circumstances the lettuce has about 100 per cent moisture content. Now assuming that her statement is true and you put that lettuce in the cooling compartment of the Potter refrigerator, the air in which is then 74 per cent relative humidity, that means that the air in that cooling [716] compartment of Potter is drier than the lettuce is; that is correct, isn't it?

A. I thought you said that the regulars were 74 per cent humidity and the Potter was 100, didn't you?

Q. No, I said this, that Potter claimed"——

The Court: Wait one minute. Did he ever give you an answer to your question?

Mr. Byron: I have forgotten.

The Court: It doesn't seem like he did because he would be not acquainted with that.

Mr. Byron: No. But it was always interesting to have the answers for the plaintiff but when the defendants asked the questions they don't know. See, they are just dumb.

Mr. Cuningham: Your Honor, he does give an answer on——

Mr. Maguire: I think that's totally uncalled for.

The Court: The jury is instructed to disregard those statements. I am just trying to find out, trying to shorten this. There are a lot of questions here. This man is a salesman, advertising man, and obviously not acquainted with technical points with reference to lettuce or any other commodity. I think

(Deposition of Paul B. Zimmerman.)

that the only merit of this testimony of Quinn and Zimmerman is that to tell what the type and kinds of machines were on the market at this particular time and whether there were any machines which had moist cold in them and two-temperature refrigerators. I think that that [717] is about all that can be claimed for this testimony. And to interrogate him as an expert, which obviously he is not, just seems to me to be a waste of time.

Now, you can go ahead and ask these questions which he doesn't know anything about. I think I have already told the jury that he doesn't know anything about it. Do you want to read all those questions, Mr. Byron?

Mr. Byron: I am going to abide by your Honor's conclusion.

The Court: Well, I notice here again——

Mr. Cuningham: Does that bring us over, then, to—of course, what you just said applies to the testimony as to the patent in suit. It seems to me that it goes over—well, I don't know, it's Mr. Byron's examination. It seems to me it goes over to——

The Court: Mr. Byron, do you want to interrogate him concerning the patent?

Mr. Byron: Well, I have found that it was useless. He had the patent right before him and the drawing and didn't want to answer it, and that's all I can say.

Mr. Maguire: Now, if your Honor please, that, I think, is highly improper. Now, either counsel

(Deposition of Paul B. Zimmerman.)

wants to put it in—if he doesn't we are not going to object—but I think it's highly improper that he should give a highly partisan conclusion as to what was testified. The insinuation is [718] that the witness was not willing to tell the truth.

Now, this is testimony and let's find out about it or else that remark should be withdrawn.

The Court: All right. We will put in the testimony then under those circumstances. But have you read his testimony?

Mr. Maguire: I read it hastily. I seriously agree with what your Honor said, but if the counsel agree with your Honor then it should be left out. But I think if it's to be left out then it is highly improper for counsel to give his conclusion as to whether the witness is being frank or honest on things that are being left out.

Mr. Byron: I didn't say he was dishonest at all.

Mr. Maguire: Evasive.

The Court: I think it's obvious, Mr. Maguire, that he doesn't know anything about reading of patents, and I think everybody concedes that.

Mr. Maguire: Oh, yes.

Mr. Byron: Well, I am perfectly willing to eliminate that, your Honor.

The Court: All right. Leave out all reference to the patent because he doesn't know anything about it.

Mr. Cuningham: Well, then, shall we start——

The Court: Well, that seems to be practically

(Deposition of Paul B. Zimmerman.)

all his other testimony where he is interrogated concerning the patent.

Mr. Cuningham: As I said, your Honor, I didn't examine [719] him. I didn't ask these questions. Mr. Byron asked the questions and I haven't been over them. There may be some things in here that he does know about, and I would like to have him answer. I would hate to leave out a whole group of testimony like that and group of questions.

The Court: Well, I think the witness here admits very frankly on the bottom of page 123 that he doesn't know anything about it, that his information is pretty limited.

Mr. Byron: Well, I will waive the reading of that further part of that deposition.

The Court: All right. Mr. Byron has now agreed to eliminate or to waive the reading of the balance of the Zimmerman cross-examination which ends at bottom of page 123. Am I correct in that?

Mr. Byron: Yes. Of course, in doing that I want your Honor to appreciate that I think that there are a lot of the direct questions by the same token that should not be in, but I am not going to fight for it.

The Court: All right.

Mr. Cuningham: This is on page 124, then.

The Court: All right.

(Deposition of Paul B. Zimmerman.)

Redirect Examination

By Mr. Cuningham:

Q. Mr. Zimmerman, as I recall your testimony on cross-examination, you talked about these twin boxes that were banded together in an effort to get a humidity control and also have a sharp freezing and dry temperature [720] box together.

A. That's right.

Q. You characterized that as really a product of the sales department as distinguished from the engineering department of the General Electric?

A. That's right.

Q. Did the engineering department come up with any better ideas than that at the time you put this out, made this attempt to put it out?

A. No, not that I recall. It was on the order of a sales experiment.

Q. If they had come up with a sounder, more fundamental engineering solution, you probably would have considered it seriously."

Mr. Byron: There, you see is the position talking about engineering. He is a salesman. It is a question about engineering.

Mr. Cuningham: May I read Mr. Byron's interruption? Will you read your own statement, Mr. Byron?

Mr. Byron: "Mr. Byron: Now, wait a minute. That is leading. You are putting words in the witness' mouth. Ask him what effect it had or what-

(Deposition of Paul B. Zimmerman.)

ever you want to. I am tired of this leading. Cunningham, I think you are terrible that way."

Mr. Byron: Why does he want me to read that?

Mr. Cuningham: "I accept with good grace Mr. Byron's [721] criticism, and I will adopt his words.

Q. What can you say in response to the question as amended by Mr. Byron?"

The Court: I am going to strike that question and that answer and the next question. I am going to strike the rest of it down to the top of page 126.

Now, Mr. Byron, what is that, is that recross? What does it go to? I am going to strike that also.

Mr. Byron: Yes.

The Court: I am going to strike the rest of that because it refers to a technical matter.

All right. The examination of Mr. Zimmerman has been completed.

Mr. Byron: I don't know if your Honor agrees that that statement of counsel should not be in there.

The Court: Which one is that?

Mr. Byron: The statement of Mr. Cuningham on page 127.

The Court: Oh. He made that statement in his opening to the jury. He made that same statement in the opening.

Mr. Cuningham: I didn't know we read anything on 128.

The Court: 127, Mr. Cuningham. It's your final statement.

Mr. Maguire: Well, it isn't being read in the record anyway, is it?

Mr. Cuningham: I would be glad to have it in if anyone wants it in. [722]

The Court: Immaterial to me. But if you both agree on it——

Mr. Cuningham: Does Mr. Byron want it in or out? I object.

Mr. Byron: His Honor has stated that you made that statement before the Court and jury in your opening statement. I will let it go at that.

The Court: Fine.

Mr. Cuningham: All right.

The Court: Mr. Cuningham, will you call up your next witness or read the next deposition? Have you got another deposition here today?

Mr. Cuningham: Yes. But we don't plan to finish it, sir. We won't finish it.

The Court: Have you got a short one?

Mr. Maguire: The party——

The Court: I can't hear you.

Mr. Maguire: Not without destroying the sequence of putting it in. I think we can get along fairly well with this.

The Court: Which deposition is this?

Mr. Cuningham: This is the deposition of Mr. Evans T. Morton taken——

The Court: All right. Have you got it? We will go for a half hour on it. [723]

Mr. Cuningham: I do have a short one, sir, in the back of it Mr. Douglass. I think we could finish that, perhaps.

The Court: All right. Mr. Douglass' deposition

will be read now. I want to get the jury out of here by 4:00 o'clock. Douglass starts on 377.

Mr. Cuningham: Yes, your Honor, and runs to——

The Court: Well, we will find out what it runs to. It looks like a lot of colloquy in here. Have you, Mr. Cuningham, gone over that with Mr. Byron?

Mr. Byron: I have decided not to ask to have any deleted.

Mr. Cuningham: I have not gone over it with him.

The Court: Is it agreed that all colloquy can be omitted? There is some.

Mr. Cuningham: All pure colloquy. If there are any admissions here—you understand, this is an examination of our adversary, not a deposition de bene esse, and it may be that remarks are in here by counsel which I would not call colloquy, and I suppose your Honor would not call colloquy.

The Court: Ladies and gentlemen, Mr. Darrell Douglass is an employee of the Admiral Company. Is that right?

Mr. Cuningham: He is a patent lawyer.

The Court: He is a patent lawyer. Is he employed by the Admiral Company?

Mr. Byron: He has his outside practice, and, as I understand it, he is retained by the Admiral Company and [724] spend a part of his time in Chicago. He lives in Cleveland, has his office there, and he goes over to Chicago every second week for two days, as I understand it.

The Court: All right. I think that tells it. I

might say this to those persons who are on the jury, in explaining this deposition, that ordinarily when one calls a witness to testify in your behalf you are bound by the answers given by such witnesses unless you are caught by surprise. And under certain limited circumstances you can impeach the testimony of your own witness. But that is not the case if you are cross-examining or examining an officer or agent—it's something more than a mere agent—of the other side. You are not bound by the answers that he gives.

The same thing is true with an ordinary employee. The minute he begins to show any hostility then you are not bound by the answers given by such witness. Now, I don't know what classification Mr. Douglass falls into, but we will be able to tell.

Now, on this type of an examination ordinarily the questions propounded by the attorney can be leading. You have heard, during the course of this trial, objections made because the questions were leading. You can't put words in the witness' mouth when that witness is your witness. But if on cross-examination you can ask him leading questions, for example, "Weren't you at this house at a particular time?" [725] That is what you call a leading question.

Now, I think under these circumstances Mr. Cunningham is permitted to ask leading questions and the probabilities are that he has. So go ahead, Mr. Cunningham.

Mr. Cuningham: I will state this deposition was taken June 1st, 1955, at the offices of Mr. Byron in Chicago.

DEPOSITION OF J. DARRELL DOUGLASS

"Q. Would you give us your full name and address?

A. J. Darrell Douglass, and I reside at 21625 Kenwood Avenue, Rocky River, Ohio.

Q. What is your occupation?

A. I am a patent lawyer.

Q. Are you a patent lawyer for Admiral Corporation?

A. Yes. They are one of my clients.

Q. How long has Admiral Corporation been one of your clients? A. The fall of 1940.

Q. What is the nature of your work in representing Admiral Corporation?

A. I write patent applications for them, make investigations into patentability and novelty.

Q. In connection with their own developments?

A. In connection with their own developments.

Q. Do you also do that in connection with the developments of others? A. Yes.

Q. As adversely held patents? [726]

A. I don't understand the question.

Q. Well, you mean patents of others other than Admiral Corporation. Do you conduct these investigations you just testified about in connection with patents of others than the Admiral Corporation on behalf of Admiral Corporation?

(Deposition of J. Darrell Douglass.)

A. I look at patents owned by other people to determine whether or not there is infringement, if that is what you mean, and if they are valid.

Q. You do that on behalf of Admiral Corporation? A. Yes.

Q. That has been true right along during this fifteen-year period? A. Yes, it has.

Q. What other duties do you have in this connection with Admiral Corporation?

A. Well, they have certain trade-mark applications that I take care of and occasional license agreements that have to be written in connection with patents; nearly everything that involves patent work is done by me.

Q. Do you have any practice of giving patent clearance or patent approval to the devices of Admiral Corporation?

A. I am frequently asked whether there are any patents that would be infringed by certain structures, and in that case I would make a search to determine whether there are any patents, and advise them whether there is any infringement. [727]

Q. Do you likewise give patent approval to public relation or license releases? A. No.

Q. Have you ever done that for Admiral Corporation? A. No.

Q. What is your advice with respect to adversely held patents, do you consider first the question of infringement and, second, where assuming you found infringement, or what is your practice, in your own words?

(Deposition of J. Darrell Douglass.)

A. First we look at the patent and see whether the structure appears to be pertinent to the subject matter, and examine the claims to see whether they read on the subject matter, and then if we find the claims are liable to read rather close then we try to determine the possibility of whether that patent is valid or invalid.

Q. Now, in connection with this business for Admiral, do you represent them in all fields or just in the appliance field?

A. I represent them in all fields.

Q. With respect to the appliance field have you ever had occasion to pass on the infringement or validity of adversely held patents? A. Yes.

Q. Give me one such instance, if you recall any.

A. In what field, or just any field? [728]

Q. In the refrigeration field.

A. In the refrigeration field?

Q. Yes. I will amend that. In any field, first.

A. Well, I have had occasion to examine patents"——

Mr. Byron: Your Honor, this is so far afield I can't see much sense in going into that.

The Court: I think you are absolutely right. Objection is sustained. [729]

The Court: I am not going to go into Armstrong. We are just trying one patent case.

Mr. Cuningham: Your Honor, this is not going into Armstrong in any sense of the word. I was in the Armstrong suit. It is simply a question of his practice; what he did.

(Deposition of J. Darrell Douglass.)

The Court: I do not understand what relevancy the practice of Mr. Douglass has to any issue of this case.

Mr. Byron: The witness has stated generally that he considers infringement and validity of the claims.

Mr. Cuningham: Your Honor, I would prefer to tell you my idea of the materiality of this not in the presence of the jury.

The Court: Very well; we shall go into chambers.

(Thereupon Court and counsel repaired to the Court's chambers where the following proceedings were had:)

Mr. Cuningham: Your Honor, you know the issue that we have had in the beginning of willful infringement by the Admiral Corporation on the question of damages. It is deliberate willfulness. I want to show what this man's practice is in thoroughly considering a vital portion of what they were doing.

Mr. Byron: Therefore it is not willful.

Mr. Cuningham: It likewise has a very [730] significant relationship—I shudder when I say—it is more important, I think to the willfulness.

The Court: Do you think that it is admissible?

Mr. Cuningham: I think so, sir.

Mr. Byron: I do not see how it is.

Mr. Cuningham: He is a technical man.

Mr. Byron: He has shown that now. You are

getting into searches, and you are getting into Armstrong.

Mr. Cuningham: He read the Armstrong, he has considered the question of validity. They considered the validity there, you see.

Mr. Byron: That is what the Armstrong patent is.

Mr. Cuningham: I want to show what this fellow thinks right off the bat of everything, go into the claims, what meaning——

The Court: What happened in Armstrong?

Mr. Cuningham: They were sued by Armstrong. They turned him down. Armstrong is the fellow who committed suicide in New York.

Mr. Byron: Of course, now, Admiral caused him to commit suicide.

Mr. Cuningham: If anybody did, I did. I was on the other side with R.C.A. He jumped out of a window. We had nothing to do with that, of course.

The Court: I am going to rule that if Admiral had [731] been found to have infringed the Armstrong patent and this Douglass had given the advice, but I cannot see the relevancy of the testimony concerning a specific patent.

Mr. Cuningham: I have not made myself clear, and the reason is I am so close to this thing that I guess I have difficulty doing it; but there is a routine of any patent lawyer when he is considering an adversely-held patent for his client, and his client wants to find out as to whether or not he can go ahead. The first thing he does is consider the infringement because it is infringement.

The Court: He has already testified to that.

Mr. Cuningham: But I want practice. This is not trying the Armstrong suit, that he was liable for or anything else——

Mr. Byron: He tells you later he investigated this patent, the patent in suit.

Mr. Cuningham: I think I have misled Judge Solomon. I think just the fact that I grabbed the Armstrong patent out of the air; I could have said the Smith patent. I happened to know something about the Armstrong. That's why I said Armstrong.

(Thereupon Court and counsel repaired to open court where the following proceedings were had before the jury:) [732]

The Court: I find out from Mr. Cuningham he has just one question about Armstrong that goes into the general practice of this lawyer, and so I am going to let it in.

(Thereupon the reading of the deposition of J. Darrell Douglass was continued as follows:)

DEPOSITION OF J. DARRELL DOUGLASS

Direct Examination
(Continued)

"Q. Did you consider the question of validity or non-validity? A. No validity.

Q. Just the infringement question?

A. Yes, just the infringement question.

Q. Isn't it a fact that where your investigation

(Deposition of J. Darrell Douglass.)

stops by and large is on the consideration of infringement?

A. No, I wouldn't say they stop there.

Q. Do you think most of them include the issue of patentability or validity?

A. I think that a good many of them are a consideration of whether a device is patentable or whether it is infringed or not.

Q. I am trying to make a distinction, which I do make in my own mind, and I think most patent lawyers do, between issues of validity and issues of infringement. That is not a novel distinction to you, is it? [733]

A. Well, ordinarily if you have a very clear case of infringement you might not necessarily go to the expense of conducting a validity investigation."

"A. Well, I might make sure the record is straight there. It is non-infringement I had in mind.

Q. (By Mr. Cuningham): That makes more sense to me.

So is it or is it not true or have you not found it to be true that in most instances for any client you found it unnecessary to go into the validity of a patent in conducting investigations?

A. I would say that is true.

Q. And to further keep the record straight on that we know what we are talking about, it is perfectly possible to infringe an invalid claim, is it not, in our patent lawyers' parlance?

(Deposition of J. Darrell Douglass.)

A. Well, my understanding of the patent law is that an invalid claim is not a claim and therefore cannot be infringed.

Q. Is that your understanding?

A. That is my understanding of the patent law.

Q. That is how you used that term or the terms 'infringement' and 'validity'?

A. You will have to make yourself clear what you are asking for.

Q. So we can make the record clear, what did you mean by [734] infringement of a patent claim?

A. I mean when a patent claim is infringed if it appears to read upon a structure in question and you can apply it to that structure.

Q. Is that without regard to whether it is patentable over some public use or prior patent?

A. If you had no knowledge of whether the claim was valid then it would be without regard to something you might subsequently find that would indicate that.

Q. We are talking semantics now. Isn't it entirely possible that an invalid claim may be infringed by a structure or device?

Well, then, sir, do you advise the Admiral Corporation with respect to patent marking on their devices under Section 4900 of the Revised Statutes?

A. Yes.

Q. What investigation do you conduct in connection with determining what patents should be marked as covered by a patent claim or the patent claim of the Admiral Corporation?

(Deposition of J. Darrell Douglass.)

A. If there are——

Q. Validity or infringement?

A. Infringement.

Q. You don't consider the question of validity?

A. No.

Q. So that you advise the Admiral Corporation to mark a [735] patent on their device regardless of whether the claim is invalid or not? You make no investigation of that subject matter, is that correct?

A. Well, I am trying to answer the question so as to give you a proper answer. In conjunction with the application of the patent marking to any of the Admiral devices patent numbers that are put on there are those patents which I have examined and compared with the structure and found the claims to read upon the device and which patents are those of a license or one of Admiral's own patents.

Q. Now, Mr. Douglass, will you look at the volume that is on the corner of the desk in front of you, which contains an index which I believe to be complete showing all of the patents owned by the Admiral Corporation, and will you tell us, if you can, which of those patents you have advised marking on the devices of the Admiral Corporation?

Have you checked that volume?

A. Yes, I have.

Q. Can you answer the question as to which patents were marked?

A. None of the patents in that volume were

(Deposition of J. Darrell Douglass.)

marked on any of the refrigerators, to the best of my knowledge.

Q. Now, you have mentioned certain patents that were licensed to Admiral Corporation, the licenses, copies of which we have put into evidence here, required marking in [736] accordance with instructions from the licensor.

Did you also pass on whether those patents should be marked on the Admiral devices? This is in the refrigerator field, by the way.

A. That is right. In recent years I have checked those patents and those labels, but the original labels I did not.

Do you wish these numbers read into the record?

Q. Yes, please."

The Court: What is the purpose of that?

Mr. Cuningham: To show the marking of Admiral Corporation on their refrigerators, your Honor, the patents that they list under which their refrigerators are made.

The Court: Very well; go ahead.

Mr. Byron: You know, your Honor, the purpose of that marking patent numbers on a label, pasting them on a door or having a decalcomania is to give notice that the refrigerator, particularly a refrigerator, is manufactured under one or more patents listed; that is all. It is just notice.

The Court: Are these patents of Admiral patents which Admiral licenses from other companies?

Mr. Cuningham: Yes, your Honor, on which they pay royalties. [737]

(Deposition of J. Darrell Douglass.)

The Court: Read them.

"A. (Reading): 2,161,881; 2,180,493; 2,181,856; 2,191,326; 2,364,038; 2,274,942 and -3; re-21,941; 216,506; 2,228,144; 2,330,915; 2,330,916; 2,336,416; 2,361,792; re-22,214; Canadian 413,512.

These numbers are taken from a label designated 135-A2300.

Q. Is that the form number of the label or is that a model number, or do you know?

A. I believe it is the form number of the label.

Q. Do you know for what model that label was used? A. I do not.

Q. Do you recall advising with respect to that marking? A. No, I do not recall.

Q. Well, I call your attention to the fact that the patents licensed from the General Motors, Frigidaire Division, were apparently without exception on that label. Those are the Nash-Kelvinator patents to a man by the name of Phillip.

Do you recall those patents?

A. I recall some patents along that nature, yes.

Q. The rights under those patents channeled from Nash-Kelvinator to the General Motors, Frigidaire Division, to [738] Admiral Corporation under a license agreement dated February 1, 1945, is that correct?

A. I wouldn't know unless I saw the agreement.

Q. You have no recollection of it?

A. I know there is an agreement but I cannot tell you what the date is without looking at it.

(Deposition of J. Darrell Douglass.)

Mr. Cuningham: What is the date of that particular label, do you know?

The Witness: The label has no date on it.

Mr. Cuningham: Do you know what date that is, Mr. Byron?

Mr. Byron: I was looking for that. There is no way of telling. I suppose that is when those patents were still in existence, still alive.

Q. (By Mr. Cuningham): I think it will be convenient if you will check me to supplement the reading of this label, so we won't mark it as an exhibit, by stating it is headed at the top 'Admiral Corporation, Chicago, Illinois, U.S.A.' and then the statement introductory to the list of patents appears as follows:

'This refrigerator manufactured under one or more of the following patents.'

Also, at the end of the list is a statement:

'Other patents pending.'

Did you advise in connection with the form of that language, 'one or more of the following [739] patents,' Mr. Douglass?

A. I don't recall whether I dictated that particular language or not.

Q. Well, did you approve that form of language in substance?

A. I doubt very much whether I approved it or not or whether anyone asked for my approval.

Q. Did you advise in substance that just that statement be made in connection with the patent notice? A. Did I?

(Deposition of J. Darrell Douglass.)

Q. Yes. A. I have already said I did not.

Q. That you did or did not? A. Did not.

Q. Would you have advised against it?

A. I don't think I would.

Q. You don't know now whether all of those patents read on the device of the Admiral Corporation to which that notice was affixed, do you?

A. No, I don't.

Q. Did you ever?

A. To the best of my recollection at some time or other I have checked those patents against the refrigerators they were being applied to and came to the conclusion it was proper to put those markings on them. [740]

Q. Now, you mentioned in your testimony, I believe, that it was also part of your duty to advise with respect to licenses from the Admiral Corporation to others. Have you in mind any licenses in the refrigeration field running from Admiral to any others? A. Yes.

Q. What was that license on?

A. That was a license under a gasket patent.

Q. I direct your attention to patent number 2,636,228 in that volume and ask you whether that is the Morton patent under which that license was issued? A. Yes.

Q. Who was licensed or is licensed under that patent?

A. Now, let's see, B. F. Goodrich, Goodyear Tire & Rubber—no, General Tire, Westinghouse. There

(Deposition of J. Darrell Douglass.)

are some others but I don't recall who they are at this time.

Q. Were these others in the tire field or in the refrigeration field, or both?

A. They were in the tire field, and in the case of Westinghouse in the refrigeration field.

Q. Have you licensed Frigidaire or General Electric under this patent? A. No.

Q. Have you attempted to license them?

A. No. [741]

Q. Those licenses have all been issued within the last two years, haven't they? A. Yes.

Q. What in general are the terms of the licenses? They are non-exclusive, I assume?

A. Non-exclusive. Revocable at the will of the licensor, minimum royalty $200.00 a year, and two and one-half per gasket, with two and one-half per cent per gasket prorated against the $200.00 minimum.

Q. Now, are there any other licenses in the refrigeration field that you have worked on from Admiral under any of Admiral's patents?

A. No.

Q. You know it to be a fact, do you not, there are no such licenses under any such patent?

A. No, I do not know it to be a fact. You asked me if I knew, and I don't know.

Q. Now, have you had occasion to consider the patent in suit, reissue number 23,058 or its original, number 2,056,165? A. Yes.

(Deposition of J. Darrell Douglass.)

Q. In what connection have you considered that patent?

A. In connection with whether the claims might be infringed.

Q. By any device of Admiral?

A. By any device of Admiral.

Q. Is that the substance of your consideration, or did you [742] go on to the issue of validity?

A. I considered the issue of validity, also.

Q. But you have considered the issue of infringement first? A. Yes.

Q. In connection with your consideration of the issue of validity did you happen to run across the Anderson patent, a copy of which I hand you?"

(Discussion off the record.)

"Q. Did you consider any other patents than this Anderson patent that I have just shown you, in that same connection?

A. I don't recall what patent I considered in connection with this.

Q. Do you recollect there were any others?

A. I don't recall whether there were any others.

Q. You are sure you did consider this Anderson patent, though?

A. To the best of my recollection I did consider the Anderson patent.

Q. Is it your present recollection that is the only prior art patent you considered?

A. I have no recollection——

Q. Did you consider any other prior practices

(Deposition of J. Darrell Douglass.)

or prior uses? I am broadening my question now from prior patents. [743] A. No.

Q. Have you had any experience in the household refrigerator art other than the Admiral Corporation? A. No.

Q. When was the first question of patents in the household refrigerator art submitted to you by the Admiral Corporation, or approximately when?

A. I couldn't answer that question within one year. To the best of my recollection it was about 1947 or '46.

Q. Maybe it will assist you if I direct your attention to the Admiral interrogatory, Exhibit G entitled 'Option Agreement' which is dated on Page 5, January 22, 1944, and is between Stewart-Warner Corporation and Admiral Corporation.

Are you familiar with that transaction evidenced by that agreement?

A. I have seen papers of the general purport of this, but I merely know what they are generally, and it had nothing to do with this proposition at all.

Q. Was your advice sought in connection with this? A. No, it was not.

Q. Was your advice sought in connection with the original or patent in suit against the Stewart-Warner—— A. No.

Q. Not sought by the Admiral Corporation?

A. No.

Q. Was your advice sought in connection with the reissue of that patent? A. Yes.

(Deposition of J. Darrell Douglass.)

Q. When?

A. Sometime after its reissue.

Q. And after the present suit was filed, or do you recall when that was?

A. It was before the present suit was filed.

Q. It was filed in 1951? A. It was before.

Q. How long before 1951 was your advice sought, and I direct your attention to the fact the reissue patent issued December 14, 1948?

A. Before 1951, did you say?

Q. Yes.

A. It was not before 1951, as I recollect.

Q. Was it in 1951? A. I believe so.

Q. Was it in that connection that you considered this prior art you have testified about?

A. The Anderson patent?

Q. Yes.

A. I think I considered the Anderson patent.

Q. I will show you Siragusa Exhibit 7 in this case, and [745] direct your attention to the——"

Mr. Byron: There, your Honor, we are talking about——

Mr. Cuningham: I withdraw that; I withdraw that. That concludes the examination, your Honor.

The Court: Ladies and Gentlemen of the jury, we are going to recess in a minute or two until Monday at 1:00 o'clock. There are various things I want to tell you, but before I do I am going to ask Mr. Maguire——

Mr. Maguire: I had mentioned to your Honor yesterday that I want to be excused from this case

until we come back after Thanksgiving. There are matters that have long since been set before Judge McColloch, and we have out-of-town counsel, and I cannot get them put over. I would greatly appreciate, your Honor, if I could be excused until I can dispose of those matters.

The Court: That is perfectly all right, Mr. Maguire. I know you have a case before Judge McColloch and that it is necessary to be there, and if and when you get through with those cases come back into this case.

Mr. Maguire: Thank you, your Honor.

The Court: On the first day and again on other days I told you please do not make up your minds on how this case can be decided until you have heard all of the evidence, the arguments of counsel, and instructions of the Court. [746]

You are just about to take a few days off, and I want to impress that upon you. On various occasions during the taking of the testimony I said, "In my view, this evidence is immaterial," but I let it come in, saying that I would take care of it later. I believe that throughout this case not only on plaintiff's case, presentation of the evidence, but also on the defendants' presentation immaterial matter will come in the evidence. Likewise, there is evidence that was introduced for a particular purpose.

For example, the testimony we have heard today, or much of it given by sales people and sales managers, was introduced for a limited purpose, and you will not know in what connection you may con-

sider this evidence until you have heard my instructions.

At the conclusion of this case, because there will be a number of recesses, I will marshal the evidence for you, and I will point out to you what the principal issues are, some of the evidence that was introduced in connection with such issues, and tell you for what purpose evidence may be considered, and I shall instruct you generally as to the law which governs this case. Until I instruct you as to the law, you will not know what credence or what emphasis or in what regard certain evidence may be considered. **[747]**

This is a difficult case. It might not be so difficult, but at this time there has been introduced evidence which may not be apparent to you as to the purposes for which it is introduced. I think that when you hear the explanation given to you by Mr. Cuningham or the other attorneys on behalf of Plaintiff and by the attorneys for defendants they will show you the relevance or immateriality of certain evidence that has been introduced, and after they are all through, then I will give you my views as to the subject; but all this is preliminary to the statement I am about to make once again.

Please do not make up your minds as to how this case should be determined until you have heard all the evidence, the arguments of counsel, the instructions of the Court. Do not talk to anyone about this case, even members of your family, and, above all, keep an open mind.

We look forward to seeing you again on Monday

at 1:00 o'clock. Good night and have a good week end.

(Thereupon, at 4.00 p.m., the jury retired for the week-end recess.) [748]

The Court: Is there anything that should go on the record? Mr. Maguire, have you received Exhibit 114 from the defendant?

Mr. Maguire: Yes, your Honor. Is this in? All of them, your Honor.

The Court: Is there anything else that should be considered at this time?

If not, we will adjourn until Monday at 1:00 o'clock.

(Whereupon, at 4:15 o'clock p.m. an adjournment was taken until Monday, November 21, 1955, at 1:00 o'clock p.m.) [749]

Monday, November 21, 1955—1:00 P.M.

(Proceedings herein were resumed pursuant to adjournment, as follows:)

The Court: Mr. Cuningham.

Mr. Cuningham: If your Honor please, we would like to vary the pace and have a live witness, if we might.

The Court: Call your witness.

Mr. Cuningham: Mr. Parker. Before doing so may I offer in evidence Plaintiff's Exhibit 19. It is the book of Admiral patents. We offer them all but we have particularly in mind Exhibit 19-S. I guess the cover was marked 19-A.

The Court: Is this the list of exhibits that Mr. Byron prepared or is this the list that you prepared?

Mr. Cuningham: This is on our list as Exhibit 19-A.

The Court: Plaintiff's exhibit?

Mr. Cuningham: Plaintiff's exhibit.

The Court: All right.

Mr. Cuningham: And it goes all the way through each patent, each patent being numbered to——

The Court: Do you have an extra copy?

Mr. Cuningham: ——II, several copies of that particular patent. It's Patent No. 2,586,853. I would be glad to give you a copy now if you want it.

Mr. Byron: All right. [750]

Mr. Cuningham: There are other patents in the book to which we will refer later, but I wanted to call attention to this one. Here is the patent we want to talk about.

Mr. Cheatham: Plaintiff calls Mr. Norman S. Parker as a witness on behalf of the plaintiff.

NORMAN S. PARKER

was produced as a witness in behalf of the Plaintiff and, having been first duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Cheatham:

Q. Mr. Parker, will you give us your full name, residence, and your present occupation?

A. Norman S. Parker, age 65, residence 215 Lake Street, Evanston, Illinois; occupation, patent lawyer.

Q. With what firm are you connected?

A. I am a partner in the patent law firm of Parker & Carter in Chicago.

Q. Will you tell us, please, how long you have been with that firm?

The Court: Is there any question about Mr. Parker's qualifications as a patent lawyer?

Mr. Byron: None whatsoever. He is a very capable one.

The Court: All right. It is admitted Mr. Parker is a capable patent lawyer and he confines his activities solely [751] to the practice of patent law, is that right, Mr. Parker?

The Witness: Patent law, law relating to patents.

The Court: Copyrights?

The Witness: Copyrights, trade-marks, and unfair competition.

(Testimony of Norman S. Parker.)

Q. (By Mr. Cheatham): Will you give us your education and a little background, please?

The Court: Wait a minute. Unless you want to qualify him, we have a rule in this Court that when the qualifications of a witness are admitted you may not go into his background and other qualifications. Now, I will vary that if you want to, but I want you to know that the defendants will have an opportunity to qualify all their witnesses in great detail. But I have already told the jury that Mr. Parker is an expert and he practices patent law and he confines all the activities to the patent field.

Mr. Cheatham: Yes, your Honor.

Q. What experience have you had in the field of refrigeration, Mr. Parker?

A. I have had several clients in the refrigeration field, and for the last 15 years I have been rather frequently concerned with the filing of patent applications in the refrigeration field and I have been giving opinions on the questions of infringement or noninfringement and also of validity of claims in various patents relating to phases of refrigeration. [752] I still have some clients in the refrigeration field that are very active in our office.

Q. Are you an engineer?

A. I am not an engineer.

Q. Are you a refrigeration engineer?

A. I am certainly not a refrigeration engineer.

The Court: There is no question about Mr. Parker, he can read a patent, is that right?

Mr. Cheatham: Yes, your Honor.

(Testimony of Norman S. Parker.)

Q. Are you familiar with the Reissue Patent No. 23,058, a Bronaugh-Potter patent in this suit?

A. I am familiar with this patent to the extent that I have read the specifications and claims carefully a number of times, and have looked carefully at the drawings.

The Court: One minute. Mr. Parker, I don't have to admonish you, but it's difficult to hear in this room and would you please keep your voice up?

The Witness: Your Honor, I will do the best that I can. I may possibly need a little prompting.

The Court: All right, I will do it for you.

Q. (By Mr. Cheatham): What can you tell us about that patent?

A. The patent describes and shows a domestic refrigerator in which there is a freezing compartment or pair of compartments. Can I—would it help if I referred to the chart?

Mr. Cheatham: Yes, it would. [753]

The Witness: May I step down, your Honor?

The Court: Yes, you may.

The question propounded to Mr. Parker is a pretty broad one. "What do you know about this patent?" I hope he is not going to tell us everything he knows about the patent. I just want the information that is relative to this lawsuit.

The Witness: Yes, your Honor.

(Whereupon, the witness leaves the stand and takes his place in front of a chart elsewhere in the courtroom.)

(Testimony of Norman S. Parker.)

Q. (By Mr. Cheatham): Mr. Parker, will you limit that question to explaining the operation of the device that is illustrated in the patent?

The Court: Would you mind putting that back a little, so then counsel for the defendants won't have to move it.

The Witness: Referring to Exhibit 16-A which is simply a photostatic enlargement of Figures 1 and 2 of the Bronaugh and Potter patent, it shows a domestic refrigerator which is self-enclosed, one unit there is a work compartment 11 in the bottom, at the top there is a moist—a moist cold compartment or a food storage compartment, marked 14, and between the two there is a freezing compartment or two freezing compartments marked 12 and 13.

The mechanism shown in the lower compartment includes a compressor, 15—compressor or a pump which [754] compresses whatever is delivered to it. The compressor is of a rotary type and a motor 16 operates the compressor.

The compressor receives a refrigerant along the duct or pipe 26 which you can see running across the bottom of the compartment. That pipe 26 delivers a refrigerant which at that stage has been evaporated and is, you might say, a gap or evaporator, and that evaporator is compressed by the compressor and is delivered along another pipe which is not numbered but which is shown to a condenser 18.

Now, the condenser 18 is a condenser in which

(Testimony of Norman S. Parker.)

the heat is taken out of this compressor, hot gas, so that it becomes a liquid and the heat from that gas is—can be dissipated into the room or taken off somewhere else; at least it's not any longer in the refrigerator. So what leaves the condenser 18 is a liquid which flows to a receiver 17, which is simply a container which receives the freezer and then the liquid refrigerant travels up a pipe 24 and eventually comes to a device marked 23.

Now, this gadget 23 is a pressure reduction valve, and when the refrigerant passes through that valve it gets out of the so-called high side of this system where it's under heavy compression—heavy pressure—and passes to the low side. It's a characteristic of volatile refrigerants such as are used in the industry, such, for example, as Freon 12 that when the temperature—or, rather, when the pressure is [755] allowed to drop sharply the refrigerant turns from a liquid to a gas or vapor—it evaporates, in other words, and an evaporating liquid is able to absorb a great deal of heat.

So when the evaporating liquid which passes the reduction valve 23 flows into the first coil section 22, shown in the one side of the freezing compartment, the freezing compartment proper 12, where ice is frozen, there the refrigerant evaporates or boils, you might say, and it takes a great deal of heat out of the area surrounding it, and that is why that—the temperature there remains at a very substantially below freezing temperature.

The refrigerant takes this heat by its evapora-

(Testimony of Norman S. Parker.)

tion. It is characteristic of the teachings of the Bronaugh-Potter patent that not all of the liquid refrigerant is evaporated in the first coil. A certain amount of the refrigerant still in liquid form passes up through the continuation of the pipe 24 into an upper coil structure in the upper compartment 14. There what is left of the liquid refrigerant evaporates and absorbs heat from that compartment. The particular evaporator used is indicated at 25 at the right-hand—right upper right-hand corner of Figure 2. You will see that this member called 25 has a square or rectangular—I should say a rectangular surface which, in my opinion, represents a fin and would represent a fin to anyone, any engineer, anyone qualified in this art or anyone who is used to reading [756] refrigeration patents.

And in that fin you will see crossing over to the two double lines which are ducts—represent ducts or pipes—they are part of this same pipe system. So the refrigerant winds back and forth through this finned coil system and then returns down through a pipe marked 26, which is shown in both of these figures, and that is the pipe which returns the now completely evaporated refrigerant to the compressor for further compression and use.

In other words, this volatile refrigerant travels again and again and again through this cycle, it goes up through the coils in the two compartments as it evaporates, takes heat out of those compartments and it returns that heat to the compressor and the compressor compresses the refrigerant and

(Testimony of Norman S. Parker.)

the refrigerant then runs through a condenser and in the condenser normally air is used which flows through whatever fins or surfaces are used in the condenser and the air as it exchanges—takes up the heat from the hot gas, and when the heat is taken out of the hot gas and dissipated to the atmosphere, why, then, the hot gas resumes its liquid condition, although it is still under high pressure and it is ready for another trip through the coils.

It is characteristic of the Bronaugh and Potter patent, so says the patent, that a substantially below freezing temperature is maintained in the compartment 12 and in the compartment 13. [757]

You will notice that the coil 22 flows through a member here indicated as a square which, if my memory is correct, is described in the patent as a brine tank. I believe the number 21 was applied to the brine tank. The wall 21 of the brine tank, since the brine in that tank has been thoroughly cooled by the refrigerant, serves as a means for maintaining the storage compartment 13 at a substantially below freezing temperature. So you can freeze your ice in 12, let us say, and store your frozen food in 13.

Now, the refrigerant which travels to the finned coil or expander or evaporator 25 is delivered under conditions, so the patent teaches, which will not raise the temperature of that expander—or it will not lower it, I should say—lower it enough to cause frosting on the evaporator in the upper compartment.

(Testimony of Norman S. Parker.)

The patent makes an exception that there may be a slight touch of frosting at the inlet end.

Now, there is the result and the purpose, as expressed in the patent, of having a nonfrosting coil, is that moisture is therefore not taken out of the food by the frosting action. In a domestic refrigerator of the earlier type where a coil is used to take heat out of the interior of the refrigerator and where that coil builds up a thick layer of frost, that frost is simply frozen moisture and the frozen moisture on that coil comes first into some small degree from the air [758] in the compartment, if there is high humidity, but it comes primarily from the food.

In other words, when you see a thoroughly frosted coil with a heavy layer of frozen moisture on it, you may assume that a very substantial proportion of that moisture is moisture which started in the food put in that storage compartment, and which has been taken out and deposited on the coil.

What Bronaugh and Potter teach is that a nonfrosting evaporator or an evaporator is to be used which does not accumulate frost and therefore the temperature—the load temperature relatively low but above freezing temperature of the upper compartment is maintained by a coil which is cool enough or an expander—an expander structure in this instance, a finned coil, which is cool enough to take the necessary amount of heat out of that compartment, but which is still not cold enough to

(Testimony of Norman S. Parker.)

freeze the moisture from that compartment and from the food in that compartment, and therefore there is a substantially necessary drying-out of the food, so Bronaugh and Potter taught in their patent. [759]

The upper compartment is surrounded by an insulating wall marked as 41 and with the door 34. The lower compartment has a layer of insulation, 38 and 39, and the door 35. You will notice that the thickness of the insulation in the door 35 and the wall 38 and the bottom 39 is substantially greater than the thickness of the wall of insulation of the wall 41 of the upper compartment. I am now pointing to Figures 1 and 2 of this Exhibit 16-A, and the same is true for the upper wall and is numbered 41 at the top of both figures, and there is a wall between the upper compartment which is not as thick as the outside walls of the lower compartment.

Of course, it should be understood that insulation is not a postive bar against the passage of heat. It is only an impedance, but the thicker you make the insulation, assuming that the insulation is the same type, the greater is the resistance to the passage of heat through it. Of course, you could get that result by having different insulating substances, but here shown in Bronaugh and Potter is a differential thickness of insulation.

Now, Bronaugh and Potter in order to control by a single control system the heat or the coolness of both compartments provided a thermostat which

(Testimony of Norman S. Parker.)

is shown at 31 at the upper right-hand corner of Figure 1 and also at the upper right-hand corner of Figure 2. The details of the thermostat [760] are, of course, not important and are now shown in this patent, but the thermostat or whatever member is used responds to temperature increases in the upper compartment, and when the temperature increase in the upper compartment, which is the warmer or moist cold compartment, reaches a temperature at which the thermostat is set, then the thermostat closes a switch or otherwise connects a circuit to the motor 16, and the compressor begins to cycle, begins to pull back evaporant, refrigerant, and to deliver again liquid refrigerant for evaporation in the coils.

So long as the thermostat still calls for evaporation, in other words, as long as the need for heating compensation or cooling of the upper compartment still continues, why, the thermostat leaves the motor circuit open. Finally when the temperature falls to whatever the setting of the thermostat is in the upper compartment, then the motor ceases to drive the compressor, and the delivery of refrigerant for evaporation in the lower as well as the upper compartment is virtually terminated.

The idea of Bronaugh and Potter was that they preferred to make the response to need for refrigeration to be that of the upper compartment, and by having an insulation made somewhat thinner or less resistant to the passage of temperature in the upper compartment they insured—so they said in

(Testimony of Norman S. Parker.)

their patent—that the thermostat would [761] cycle often enough not merely to keep the upper compartment at the desired temperature but to insure that the lower compartment, the refrigerating, the freezing and refrigerating compartments 12 and 13, would be kept at a temperature adequately below freezing. Bronaugh and Potter in their patent made some statements which indicate what their purpose was, and I think it might be well to read them.

Reading from Column 1, Page 1, starting with Line 4:

"The main object of this invention is the design of a refrigerator which will make it possible at one and the same time to over again or in short periods of time to perform several highly desirable tasks, namely, to form ice or freeze desserts quickly; to provide cold storage for frozen meats and foodstuffs, and to provide storage for food at temperatures above freezing."

The quotation ends with the end of Line 11.

Then in Lines 15 to 19:

"The third object is the construction of a refrigerator which is not a compromise between a quick-freezing refrigerator and one which is ideal for food storing, but which will possess both of these parties (sic) in maximum quantities.

The Court: "Properties." [762]

The Witness: "* * * both of these properties in maximum quantities." Did I misread that?

The Court: I thought you said "parties."

The Witness: Properties.

(Testimony of Norman S. Parker.)

"The fourth object is to provide a refrigerator having its heat-pumping action—this is Lines 20 to 25—controllable by food compartment temperatures and in which the efficiency of the freezing unit will be increased as the rate of heat pumping from the food department (it says here, meaning 'compartment' no doubt) increases."

"The seventh object"—this is Lines 36 to 38—"The seventh object is to eliminate completely all defrosting and objectionable drying-out of the foods."

Again starting in Line 3 and Column 2 on the first page, the patentees pointed out the problem which they were solving:

"Again, there are, generally speaking, two classes of food which are put into a refrigerator (first, food requiring merely to be kept cool—that is, above freezing, and in most cases having a relatively high rate of evaporation. Second, food having a relatively low rate of evaporation and which should be maintained at temperatures well [763] below freezing. In addition to this, comes the ever-increasing demand for the ability to form ice and freeze desserts quickly."

The patentees again later in the patent after having described and shown their structure, have this breakdown or analysis of what they did. This is starting with Line 53 of Page—of Column 5. It is on the third page.

"From the foregoing it will be seen that there is provided a refrigerator having a non-frosting

(Testimony of Norman S. Parker.)

food storage compartment in which food may be held at desirable temperatures without undue evaporation. Secondly, that quick-freezing for ice and desserts is ever available. Thirdly, that there is provided uninterrupted cold storage at freezing temperatures, and, lastly, that the necessity for regulating the control system is entirely eliminated since a wide range of temperatures is provided simultaneously, and, further, that not only is the necessity for defrosting eliminated entirely, but also the evaporation of the foodstuffs is reduced to a minimum."

That ends the quotes at Line 66.

Then starting on Line 73——

The Court: Are you through with the blackboard or the [764] diagram, Mr. Parker? If you want to sit down, you may.

The Witness: If I am asked questions on the claim, I will have to go back to that for the claim.

The Court: I thought I would make it a little more convenient for you.

The Witness: I am delighted.

Starting in Column 3, Line 73, and running through Column 4, Line 5:

"In other words, there is no objectionable frosting in the cold storage compartment, for the reason above stated, and no frosting in the cooling compartment since the temperatures maintained there is above freezing. There may, of course, occur a slight amount of frosting where the cooling coil 25 enters the compartment 25."

(Testimony of Norman S. Parker.)

Q. (By Mr. Cheatham): What is there at the end of the patent, Mr. Parker?

A. Following the description are, of course, the claims.

Q. And following that?

A. And following that is a list of the patents which were cited against the application upon which this reissue patent issued.

Q. Does that include Anderson patent 1,439,051, Anderson?

A. The fourth patent listed there is Patent 1,439,051, Anderson, dated December 19, 1922. [765]

Q. Are you acquainted with the refrigerators which were manufactured by the Potter Refrigerator Corporation?

A. Yes, I have seen several of them.

Q. Would you describe such a refrigerator, referring to any exhibit in this Court which you see?

The Court: I would like to find out the relevancy of having him describe a refrigerator rather that the patent. As I understand it, the claim here is that Admiral and Amana infringed the patent. What difference would it make if they—what is the relevancy of describing the box itself if the box itself complies strictly with the claims of the patent?

Mr. Cheatham: These are three-dimensional exhibits illustrating what the patent teaches.

The Court: I see there is no objection to it, anyway. Proceed.

The Witness: There are three refrigerators in this room which seem to be Potter refrigerators,

(Testimony of Norman S. Parker.)

and taking the one at the left of this group as I look at it, it is marked Plaintiff's Exhibit 11-B. It follows quite closely the drawing of the Bronaugh and Potter Reissue Patent 23058.

In the bottom compartment, however, where the compressor and the condenser and the motor were shown in the figures of the patent there is nothing there. In other words, whatever compressor-condenser unit was used has [766] been removed. However, in the intermediate compartment is a case which looks like, and I believe is, a brine compartment, and it has no insulation between its side and the compartment to the left. In other words, in my opinion, you have here the equivalent of the brine compartment of the Bronaugh-Potter patent and the equivalent of the cold storage chamber which is cooled by the side of the brine compartment. In the upper compartment there is a thermostat, rather, it is called in this particular instance a time-o-stat. I haven't checked that, but I am sure that that is a heat-responsive control responsive to the temperature in the separate compartment. You will notice that the compartment has shelves which are made of openwork rods so that air can circulate through them. In the back of the compartment is a piece of sheetmetal which is shaped and proportioned just about as the front baffle is in Figures 1 and 2 of the patent. If you will look at Figure 2 (referring to diagram) there is a wall which comes down vertically along the finned coil 25 and that at a level below that coil it runs sideways to an in-

(Testimony of Norman S. Parker.)

clined section and then terminates in a vertical section, and a little gutter. That gutter edge runs across and terminates in a little downspout 29 which is shown as directly above a container 30 which looks like, and I am sure it is, a conventional milk bottle. In other words, when any moisture condensed on the finned coil it drops into [767] the gutter 28 and flows to whatever container you use.

Now, this wall, you will see, is open at the top and supported by a couple of brackets so that air can circulate above the upper edge and around the lower edge, and, of course, about the end because the ends do not seal up against anything, and that is precisely the way this shield is shown in this Potter refrigerator. It is supported by two brackets just as in the patent drawing. It has a little downspout at the left end, and there does not happen to be a milk bottle there or anything, but that could be put there, and it is open at the top, and as you see from my hand, it is open at the bottom. It is open at the ends so that air can circulate in through the rear space, and running above the top of it are the series of fins. Those are vertical fins. I would say there are about 30 of them. They are fairly closely spaced, and they come down within, say, an inch of the bottom, but I can feel with my finger although I cannot show them to you. So, in other words, you have here everything as I have described in the Bronaugh and Potter patent except the cycling liquefying unit in the bottom, and, of course, we cannot see the ducts which deliver the

(Testimony of Norman S. Parker.)

refrigerant to the coils. It is my opinion that th
ducts that are hiding in that patent are substa
tially the same as shown in the patent office dra
ing, particularly as the patent office drawings sho
quite a [768] resemblance to this machine in th
general proportions, as so forth.

Now, this second box, Plaintiff's Exhibit 11-A,
marked a Potter box, and it looks very much as
the patent office drawings had been made from i
I do not know that from my own information.
simply get the impression from looking at it tha
the resemblances between this box and the pate
office drawings are so close that it would be mo
than a coincidence if the patent office draftsme
had gotten that result without seeing this box.

The box again has a motor and the compresso
in the bottom compartment. There is a brine tan
in the second compartment, and you will notic
that the number of shelf space or spaces for mak
ing ice is the same as in Figure 1 of the Bronaugh
Potter patent and that the upper right-hand co
ner, you have a generally square opening. Belo
that are two oblong openings, and along the le
side of the brine tank are four openings, and th
proportions are about as shown in the patent offic
drawing.

Again, you have the metal shield which is pro
portioned just as described, or substantially as de
scribed, in connection with the first Potter box
discussed, so we have in this structure, except fo
the fact that we cannot [769] trace the ducts, th

(Testimony of Norman S. Parker.)

pipe, we have then what is general in the patent, and you will notice here is the differential insulation since the insulation of the bottom compartment clearly is thicker than the top compartment, and the insulation at the door is clearly thicker than in the top door. [770]

That is also true of the Plaintiff's Exhibit 11-B which I discussed before. Now, there is a later type of Potter refrigerator which is marked Defendants' 116.

Mr. Cheatham: That's correct.

The Witness: This is a somewhat more finished looking job. I do not see in it the thermostat. It doesn't happen to be evident. But in the back of the upper compartment is, again, the metal baffle which is open at the top and which is open below and which has a gutter across the bottom. By feeling in back of it I feel a row of fins. I counted them the other day in the courtroom and, if my memory is correct, there are 60 of these fins. They are more numerous and somewhat smaller, of somewhat less area, than those in the first two boxes that I testified about.

I won't try to take this apart, but I don't believe there will be any dispute but that in the lower compartment there is a—some means for cycling the refrigerant through whatever coils are used in this particular box.

Now, this box differs in proportions and size and finish from the other boxes, but here, again, you see that there is a thicker insulation or thicker

(Testimony of Norman S. Parker.)

walls, anyway, about the middle or freezing com
partment than there is about the upper or mois
cold compartment.

Q. (By Mr. Cheatham): Mr. Parker, with re
spect to Claim 2 of the Potter and Bronaugh Re
issue Patent 23,058, do you find [771] in the struc
tures of the Potter refrigerators, with particula
reference to Plaintiff's Exhibit 11-B, a household
refrigerator which in normal operation provide
above freezing moist cold air for preserving in
refrigerated condition foods susceptible to moistur
loss by evaporation and below freezing dry cold
air and a dry cold surface for preserving foods in
a frozen condition?

A. Yes; that's the way that exhibit operates.

Q. Do you find in that construction, said refrig
erator—and I quote:

"Said refrigerator comprising a cabinet having
a cooling compartment and a freezing compart
ment"?

A. The cooling compartment is the upper com
partment of that exhibit and the freezing compart
ment is the lower.

Q. Do you find "thermal insulation around said
compartments thermally insulating said compart
ments from each other and from the outside at
mosphere"?

A. Yes. I am sure there will be no dispute but
that the compartments are surrounded by insulated
walls and are separated from each other by an in
sulated or insulating wall.

(Testimony of Norman S. Parker.)

Q. Do you find in that structure "a cooling refrigerant expander having heat-conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment, whereby air in said [772] cooling compartment is cooled thereby to a temperature above 32 degrees F. and is maintained at a humidity whose relative value is at least 100 per cent at 32 degrees Fahrenheit"?

A. Yes. The finned coil which I described in the upper compartment responds precisely to that description.

Q. Do you find in that structure "a freezing refrigerant expander having heat-conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature well below 32 degrees F. while withdrawing heat from said compartment whereby air in said freezing compartment is cooled thereby to a temperature well below 32 degrees F."?

A. Yes. The coil in the brine tank in the lower of the two storage compartments responds precisely to that description.

Q. Do you find that there is in that structure "volatile refrigerant in said expanders"?

A. Of course, there may not be at the moment a volatile refrigerant in the expanders, but it is clear from the device that it will work with and was intended to work with a volatile refrigerant in

(Testimony of Norman S. Parker.)

the expanders. I have seen such a Potter case in th
past operate with a volatile refrigerant in its ex
panders.

Q. Do you find in that structure "a single liqu
fying unit associated with said expanders and co
structed and arranged to condense refrigerant ex
panded by heat extracted from both said compart
ments"?

A. Yes. That is a proper description of the com
pressor condenser unit which was in the bottom o
Exhibit 11-B, and is now in the bottom of it.

Q. 11-A?

A. 11-A. And also the third Potter box which
described.

Q. Do you in that structure find that "the vola
tile refrigerant circulating through said expander
being the sole heat-extracting medium"?

A. Yes. It is the sole heat-extracting medium i
that unit.

Q. Do you find in that structure "a thermosta
responsive to the temperature in one of said com
partments controlling the operation of said liquefy
ing unit"?

A. The thermostat or its equivalent is shown i
the upper compartment of Plaintiff's Exhibit 11-A
and 11-B. I didn't spot the thermostat in the third
box but I am sure that there is one there.

Q. Mr. Parker, how does Claim 1 differ from
Claim 2 of the Reissue Patent 23,058?

A. Well, Claim 1 has the—all of the features o
limitations of Claim 2, if my memory is correct, but
it calls also for air in the freezing compartment

(Testimony of Norman S. Parker.)

having a temperature well below 32 degrees Fahrenheit, and it also calls for air in the cooling compartment having a substantially stable temperature of about 40 degrees Fahrenheit and having a humidity whose relative value is at least 100 per cent at 32 degrees Fahrenheit. [774]

Q. Do you find that the structures, Plaintiff's Exhibits 11-A and 11-B, include those elements?

A. Yes. When the structures of 11-A and 11-B are operated the operation of the freezing expander or evaporator to maintain a less—below freezing temperature that the cold storage or the lower compartment will have—will maintain a body of cold air in the freezing compartment having a temperature well below 32 degrees Fahrenheit. The operation or, rather, the maintenance or the use of the finned coil in the upper compartment of the two exhibits or of any of the Potter boxes with the surface of the finned coil at above 32 degrees Fahrenheit in the use of those boxes maintains an air temperature in the box—in the moist cold compartment of above freezing and, of course, the temperature of 40 degrees Fahrenheit is within the ordinary range of use for—you can adjust the box to get 40 degrees or below 40 degrees or above 40 degrees, but 40 degrees is a typical temperature.

If the air is maintained at 40 degrees or anywhere around 40 degrees by the use of a non-frosting coil or surface which is kept adequately cold but without the formation of frost, and assuming a temperature of 40 degrees, the ratio of moisture

(Testimony of Norman S. Parker.)

or the proportion of moisture in the box of 40 degrees will be such that if the air was cooled to 30 degrees Fahrenheit it would have a relative humidity of at least 100 per cent. [775]

Q. Mr. Parker, how does Claim 4 differ from Claim 2 of the Reissue Patent 23,058?

A. Well, Claim 4 adds—has most of the limitations of Claim 2, practically all of them, but it specifies, which is an additional feature, that the thermal insulation around the cooling compartment offers less resistance to flow of heat thereto from the outside atmosphere than does the thermal insulation of the freezing compartment. And as the patentee says it,

> "To insure starting of said liquefying unit by heat flow into said cooling compartment during an off-cycle of said liquefying unit before the temperature in said freezing compartment approaches a non-freezing value."

The patent, or rather the claim, also calls for a thermostat responsive to the temperature in said cooling compartment.

Q. Do I understand you that those limitations are not present in Claim 2 of the patent?

A. No, they are not present in Claim 2.

Q. Are they present in Claim 1 of the patent?

A. Yes, they are present in Claim 1, but Claim 1 adds again that language which I have read about the maintenance of air in it.

Q. Don't you mean Claim 3? Can I get that

(Testimony of Norman S. Parker.)

question again? Would you read the question? [776]

(Last question read.)

The Witness: That's right.

Q. (By Mr. Cheatham): All right. How does Claim 3 differ from Claim 4 of the patent?

A. Well, Claim 3 also has the thermal insulation language which I read and also calls for a thermostat responsive to the temperature in the cooling compartment to control the on and off cycles of the liquefying unit.

Q. Mr. Parker, in what claims are air in the cooling compartment and air in the freezing compartment specified?

A. That limitation or that characteristic or feature is described in Claim 1 and again in Claim 3.

Q. Is it in Claim 2?

A. It is not in Claim 2.

Q. Is it in Claim 4? A. No.

Q. Now, with respect to the language from Claim 3 and Claim 4—I now quote:

> "And the thermal insulation around said cooling compartment offering less resistance to flow of heat thereto from the outside atmosphere than does the thermal insulation of the freezing compartment to insure starting of said liquefying unit by heat flow into said cooling compartment during an off cycle of said liquefying unit before the temperature in said [777]

(Testimony of Norman S. Parker.)

freezing compartment approaches a non-freez ing value." Is that language clear to you?

A. Yes, it seems clear to me.

Mr. Cheatham: I ask the clerk to hand M Parker Exhibit 4-CC-2.

The Court: Is that Morton?

Mr. Cheatham: No, sir. That is Admiral.

Mr. Cuningham: I think, your Honor, they ar the exhibits next to the Admiral answers to i terrogatories.

(Whereupon, the said document was hande to the witness.)

Q. (By Mr. Cheatham): Are you familiar wit that Exhibit 4-CC-2? A. 4-CC-2. Yes.

Q. What is it?

A. Well, 4-CC-2 is Admiral Service Manual N S-410. It's the one you have in your left hand fo Models 1090, 1390 and 1191 Dual-Temp refrig erators.

Q. Are there other similar manuals there an will you describe them?

A. In the exhibits—in the group of exhibits be fore me I find also Plaintiff's Exhibit 4-CC-3, whic is a service manual. It says on its cover "Admira Dual-Temp Refrigerator Models TK-746, TK-94 758, 957, 958." In other words, five models.

Mr. Cheatham: Would you continue, please?

A. Then I find Exhibit—Plaintiff's Exhibi 4-CC-4 which is service data No. ST-505-1 for 195

(Testimony of Norman S. Parker.)

models 11C15, 12C15, 12C15-A Dual-Temp refrigerators. Then there is Service Manual Supplemental S462 which is marked Plaintiff's Exhibit 4-CC-5. That is for Models 1192 and 1192W Dual-Temp refrigerators.

Then there is Plaintiff's Exhibit 4-CC-6, Admiral Refrigerator Service Manual Supplement for Model 959 Dual-Temp. [779]

The Court: How long will it take you to go through these various things with reference to a comparison between the patent and the accused structure?

Mr. Cheatham: We are going into the accused structure now. It may take an hour, might take less; it might take a little longer.

(Discussion off the record.)

The Court: Proceed.

Q. (By Mr. Cheatham): What do these manuals purport to do?

A. Well, these appear to be service manuals for Admiral personnel or salesmen or people selling or servicing Admirals, I assume servicing Admirals. It is their guide and help in understanding the Admiral structures, primarily, I think, in order to service them.

Q. Are you familiar with the patent for Morton 2,586,853, Plaintiff's Exhibit 19-S?

A. Yes, I have read this patent with some care.

Mr. Byron: May it please the Court, that, as I understand it, is a copy of a patent which is owned

(Testimony of Norman S. Parker.)

by Admiral, and that patent, 2,583,853, is not in issue in this case at all. Now, the question is: Is there a claim in the patent in suit which is infringed by the accused structure, and if there is such a claim is it valid. Now what has that to do with a patent that is issued to Admiral Corporation?

Mr. Cheatham: Your Honor, it will help the Court and [780] jury to understand the operation of the accused devices. It is a patent on the accused device.

Mr. Byron: I do not know that that is true. I do not know if all the details of the accused devices here in Court are the same as the details in this patent. It is a long ways around—here we have the accused devices, the physical devices, and here we have a description of the accused devices. Why can't they go to the description rather than these service manuals and attempt to prove infringement?

Mr. Cheatham: Your Honor, the patent will be used for its admissions against interest.

The Court: The patent will be used as an admission against interest?

Mr. Cheatham: It will be used as an admission against interests of the defendant which are shown therein.

The Court: Is it your contention that the patent office made a mistake when they issued this later patent?

Mr. Cheatham: No, sir; I contend that it will

(Testimony of Norman S. Parker.)

explain the workings of the exhibits which are in front of the bench here and show how the claims of the patent in suit, Bronaugh and Potter Reissue 23,058, read squarely on the accused structures.

Mr. Byron: They may or may not. The accused structures as shown in this Court may not be identical in every detail with the disclosures of this patent, Morton's patent. Here [781] are the devices. Let them go by the devices.

Mr. Cuningham: If your Honor please, we will connect this up at a later period with the Admiral infringing structure.

Mr. Byron: Alleged infringing structure.

Mr. Cuningham: Alleged infringing structure. It does contain, as Mr. Cheatham says, the explanation of how that operates and contains admissions that are material to our proof of infringement. It is merely for that purpose that we offer it. It is a later patent, but the testimony in the case is that this is the main patent owned by the Admiral Corporation and illustrating the structure that is accused.

Mr. Byron: That is in the Morton deposition. It has not yet been read.

Mr. Cuningham: It will be connected.

Mr. Byron: Same objections.

The Court: I am going to permit it in. Objection overruled.

Mr. Cheatham: I would like to introduce at this time Plaintiff's Exhibit 8-A—8-A-1, which is a

(Testimony of Norman S. Parker.)

large blow-up of Plaintiff's Exhibit 8-A, both of which have been marked.

Q. Mr. Parker, you might describe for us what Exhibit 8-A-1 illustrates.

The Witness: Exhibit 8-A-1 illustrates diagrammatically an example of the Admiral two-temperature refrigerator, and [782] it shows somewhat diagrammatically a good deal of the mechanism in slightly different form shown in Defendants' Exhibit 117-A and Defendants' Exhibit 117 which are, I understand, parts of an Admiral Dual-Temp refrigerator, the particular parts where the volatile refrigerant is used to take heat out of the two storage compartments of the Admiral Dual-Temp refrigerator.

The Court: Is that right, Mr. Byron; is that what they represent? These are your exhibits.

Mr. Byron: Yes—No, they are exhibits of the other side.

The Court: I mean the actual structures here.

Mr. Byron: That is correct: that is correct, taken from them.

Q. (By Mr. Cheatham): From what was the drawing, Plaintiff's Exhibit 8-A-1, made?

The Witness. At Page 4 of Plaintiff's Exhibit 4-CC-3, the Admiral service manual for Models TD746 and 946, 758, 957 and 958, there is a cut, Figure 1, and a cut, Figure 2. The Plaintiff's Exhibit 8-A-1 was made from a blow-up of those two cuts, but it is actually produced by a draftsman following the blowup. In other words, the lining

(Testimony of Norman S. Parker.)

on the Exhibit 8-A-1 would not be the same as that on the cuts, Figure 1 and Figure 2 of Page 4 of Plaintiff's Exhibit 4-CC-3, but, in my opinion, the draftsman has carefully and accurately [783] followed the disclosures so that the disclosure of the arrangement of ducts and the relation of ducts or pipes, tubes, coils, to the two compartments is correct as shown, that is, in the Plaintiff's Exhibit 4-CC-3.

Mr. Cheatham: I offer Exhibit 8-3 as—I wish to explain that Exhibit 8-A-1 might be marked by the witness.

The Court: I do not know what you are talking about 8-A might be marked by the witness?

Mr. Cheatham: During the course of his explanation 8-A-1 might have a legend put on it by the witness.

The Court: Any objection?

Mr. Byron: None whatever.

The Court: It may be admitted.

(Drawing previously referred to and marked Plaintiff's Exhibit 8-A-1 for Identification, was received in evidence.)

The Court: How about Exhibit 9-A-1?

Mr. Cheatham: We offer Exhibit 9-A which is a small showing of that same large 9-A-1.

The Court: Show it to Mr. Byron. Any objection?

Mr. Byron: No objection.

The Court: It may be admitted.

(Testimony of Norman S. Parker.)

(Drawing previously referred to and marked Plaintiff's Exhibit 9-A for Identification, was received in evidence.) [784]

Q. (By Mr. Cheatham): Mr. Parker, referring to Exhibit 9-A-1, can you explain what the exhibit shows?

Mr. Byron: Of course, in admitting this we are being willing to admit it with the understanding we do not agree with all these legends that they put on here. We are agreeing that they properly show a figure of the reissue patent in suit and properly illustrate the Admiral accused device, but the legends we do not agree to because we know they are inaccurate in part.

Mr. Cuningham: We understand, your Honor, we did not expect them to agree, but they do illustrate that position that plaintiff will take.

The Court: All right.

The Witness: May I have that question?

Mr. Cheatham: I asked that the witness explain what the chart purports to show.

The Court: Which one?

Mr. Cheatham: Exhibit 9-A-1.

The Court: Proceed, Mr. Parker.

The Witness: At the right, upper right corner of Exhibit 9-A-1 is a chart or photostatic showing of the Figure 1 of the Bronaugh-Potter Reissue 23,058, the patent in suit. At the upper left corner is a blow-up made from a showing on the cover of the Admiral Dual-Temp refrigerator service man-

(Testimony of Norman S. Parker.)

ual, Plaintiff's Exhibit 4-CC-3, and the language [785] in between is the identification of the corresponding parts, and, of course, that was added and constitutes an expression of position taken by myself.

The Court: That is your opinion?

The Witness: That is my opinion.

The Court: Very well; and Mr. Parker is an expert and has a right to express his opinion. That is the exception about which I told you last week, Ladies and Gentlemen of the jury.

Q. (By Mr. Cheatham): Mr. Parker, referring to any of these service manuals, the charts 8-A-1 and 9-A-1, the patent 2,586,853, the physical exhibits including defendants', please explain the operation of the Admiral refrigerator, and you may mark as you go along on Exhibit 8-A-1 any item which may occur to you which may aid the Court and jury to understand the device.

The Witness: I would like to consider first the relation of Plaintiff's Exhibit 8-A-1 to the physical exhibits, 117-A and 117. The physical exhibits represent parts taken out of the Admiral box in the courtroom marked Exhibit 10-A. Exhibit 117-A, which I am touching with my pointer, includes what I believe is a sub-assembly. Part or all of it can be taken out of the machine at once, although that is of no importance in relation to what I am discussing. I think I had better turn it half around. [786]

(Witness turns exhibits.)

(Testimony of Norman S. Parker.)

In Exhibit 117-A, the upper part is a sleeve or liner which is part of the freezing compartment. In other words, the interior of this structure receives, stores food and freezes ice and whatever is in this, within this metal sleeve or liner here is kept at a below-freezing temperature. The way that it is kept at a below-freezing temperature is by circulating a volatile refrigerant through a system of tubes or a coil or a duct or whatever you want to call it, which extends about that freezing structure. [787]

The volatile refrigerant is delivered from a compressor—motor compressor unit which is hermetically sealed. Inside of this casing there is a motor which rotates a compressor and the refrigerant which has already been evaporated and which is therefore a gas flows from its upper coil of this upper sleeve down what appears to be a copper tube which delivers to this hermetic container. And those are usually built, and I am sure this is, [illegible] evaporated refrigerant flows to the suction or intake or low-pressure side of a rotary compressor and is there compressed into a hot gas. It's still a gas but it is under heavy compression. That gas flows from the—from the pressure side of the compressor to a finned structure which has a condenser.

Of course, there are a wide variety of condensers. You are familiar, naturally, with the type of finned condenser which you see in your automobile radiator and which has been known these many decades. This differs somewhat in detail, but it has the same characteristics; that is, that a fluid passes

(Testimony of Norman S. Parker.)

through some kind of a duct or line or pipe in heat-conducting relation to an enlarged surface.

In other words, the duct which carries the refrigerant to be cooled in this instance is absorbed with a large heat transfer area of fin or plate or the like, and as air passes across or through or around that structure the air of the housing, for example, in an ordinary domestic refrigerator, [788] takes heat out of that hot compressed gas and as the heat is removed the gas returns to a liquid condition, and the liquid is delivered from the opposite end of the condenser, as I think you can see here.

There is a relatively large-gauge copper pipe, although still smaller than the pipe that runs to the compressor, which delivers the refrigerant, the hot gas, to the intake end of this condenser from the outlet of the condenser. The refrigerant flows through a very thin tube which is called a capillary. It's called a capillary because it is a tube of air-like thinness. Capilla, I believe, is the Latin for air. So the capillary tube still maintains, because of its very small bore, still maintains the high pressure in the system. Then as the liquid—as the now liquefied refrigerant is delivered from the capillary tube it is allowed to expand, and as it expands it begins to evaporate, and as it evaporates it begins to take heat away from anything which is near it or around it or in relation to it.

In this instance the capillary tube comes to a point where my finger is, which is on a—which is

(Testimony of Norman S. Parker.)

just in front of a rectangular plate, about which I will have something to say later.

This plate is described in the Admiral Dual-Temp Service Manual. Plaintiff's Exhibit 4-CC-3, as a transfer plate. This I can call a primary system, the primary system [789] of the Admiral machine—this is a primary plate.

On this primary transfer plate there is a duct of intermediate bore. In other words, it hasn't got the same capacity as the duct which I am pointing at with my pointer, but it still is considerably larger in bore or in capacity than the capillary, and so some boiling or evaporation of the refrigerant starts.

Now, this thinner-gauge tube runs along that contact plate, the primary contact plate, for a distance of, on the order of, I would say, three or four inches. Then it bends over another couple of tubes and contacts, then it comes back to the plate and contacts it again, and then it runs downwardly to a considerably larger tube.

Clearly, when this thinner tube delivers a refrigerant to the larger tube, then there is a drop of pressure and an increase in the evaporation. This larger tube has an upward component or upward part which runs, as you are looking at the back of this device, upwardly and to the left, and then it takes a turn and passes what we will call later a restrictor valve, and if that valve is open to let the flow through, the refrigerant will flow along the lower edge of the primary transfer plate for a few

(Testimony of Norman S. Parker.)

inches, and then it runs into a branch or a take-off toward the right-hand end, and somewhat below the edge of the primary transfer plate.

It bends across, although out of contact, with the [790] primary transfer plate and loops around until it starts—becomes merged with or attached to or starts to deliver refrigerant to a coil—a flat coil, which is bent back and forth around the sleeve or liner at the top of this exhibit, which I have told you already is part of the freezing compartment. Then after it has finished its looping about the liner it runs back to the compressor.

Now, there is an alternative path which can be taken by this refrigerant. Assume that is impossible for the refrigerant to flow directly in the path I have just described: it runs down to the right and then down to a bend of tube close to the top of the condenser and comes back up to and is fastened to the primary transfer plate and moves back and forth on that primary transfer plate before eventually coming back to the take-off which I just described. In other words, depending upon the actuation of a little valve, the refrigerant which is delivered from the capillary tube, which in this instance is the means for getting the temperature—maintaining the pressure, rather, until the pressure-drop takes place, the refrigerant can, when the valve is in one position, escape or get—reach the freezing compartment with only a less heat-conductive relation to the primary plate—contact plate—whereas if the valve is in another position it winds

(Testimony of Norman S. Parker.)

back and forth across the heat transfer plate with a maximum heat exchange. [791]

Of course, you understood that a wide variety of valves may be used or circuits. I mean, whether that little valve is set to direct the refrigerant directly to the freezing chamber when it's open or when it's closed is a matter of choice. I believe, if I understand this correctly, that when the valve to which I am pointing is closed then the refrigerant has to flow across the transfer plate with a full heat exchange with the transfer plate, whereas if it is open your refrigerant is free to escape with a lesser heat transfer relation to the primary transfer plate.

In other words, you have here a freezing compartment unit with a freezing coil which, whenever this motor is cycling, is having heat taken out of it at a rapid rate, high capacity, and in connection with that system is a transfer plate.

Now, what is the function of the transfer plate? It is to co-operate with a so-called secondary system which is shown at the left of Exhibit 8-A-1. The primary structure which I have described is shown in a slightly different coil hook-up at the right. When this Admiral Dual-Temp refrigerator is assembled, the plate—the secondary transfer plate of Defendants' Exhibit 117 is firmly connected face-to-face in intimate contact with the primary plate. The reason why they are positioned face-to-face and with as good heat passing or heat transmitting characteristics as possible is that the [792] coil on this primary plate is the only

(Testimony of Norman S. Parker.)

means for taking heat out of the secondary moist cold compartment and getting it back to the condenser where that heat can be released to the room and gotten out of the refrigerator.

In other words, the intimate heat-conductive relation of the contact plate of the primary system and the contact plate of the secondary system is the only avenue through which heat can escape from the moist cold compartment to the liquefying unit in the lower part of the primary unit.

I might read from page 5 of the Admiral Service Manual, Plaintiff's Exhibit 4-CC-3. It says:

> "The primary and secondary transfer plates are bolted together. Thus the secondary plate is cooled by conduction when the primary plate gets cold. This method is used to cool the secondary system without any refrigerant flowing from one system to the other."

Now, as to maintaining a—that's the end of the question—as to maintaining a proper contact, the Admiral Service Manual indicates that it is not enough simply to bolt the plates together. In order to maintain the best possible heat transmission between the two plates they use this somewhat annoying material called perma gum which I strongly advise you not to touch because if you touch it it will stay with you. I got a little of it. This perma gum has metallic or heat-conducting [793] particles in it and its prime purpose is to maintain an ade-

(Testimony of Norman S. Parker.)

quate heat passage or heat flow between the two plates.

You will notice that perma gum is also used around the coils on the outside of Defendants' Exhibit 117, the purpose being to maintain as good a heat conduction relationship between the coil around the secondary cabinet and the liner—its coil around the secondary liner.

Now, I said, or I quoted that the secondary system is cooled by the primary system, as the service manual says, without any refrigerant flowing from one system to the other.

The Court: I think this might be a good place, Mr. Parker, when you are getting into this new subject, to take a recess.

Ladies and gentlemen, we will take a ten-minute recess.

(Recess.)

The Court: Mr. Parker, you were just about to refer to the manual, weren't you?

The Witness: Refer to the——

The Court: Manual.

The Witness: Oh, yes.

I mentioned in the service manual—that is Plaintiff's Exhibit 4-CC-3 at page 5—that the passage I quoted said that the method used—this method is used to cool the secondary system without any refrigerant flowing from one system to the other.

That statement is important in connection with [794] understanding how the Admiral system

(Testimony of Norman S. Parker.)

works. The very close heat contact, the relatively efficient heat conduction—as efficient as you can get by a close contact of two plates of conductive material with perma gum between them—is the heat connection between the primary system I have described in which the refrigerant by the—of the single liquefying unit I have already described circulates through the coil which cools the freezing compartment and the coil cools the moist cold compartment.

Now, how does this coil, the second coil on the contact plate, cool a moist cold compartment? It does it by cooling the secondary transfer plate. The secondary transfer plate has on the opposite side, which you cannot see, a coil which is shaped as shown in the left-hand lower diagram or part of the Plaintiff's Exhibit 8-A-1. I will mark this rectangle as the secondary transfer plate (witness marks on diagram). I will mark this other square to the right as the primary transfer plate, and it should always be kept in mind that although the primary plate and the secondary plate are shown on different physical exhibits in front of you, and the primary plate and the secondary plate are shown as separated in Plaintiff's Exhibit 8-A-1, as a matter of fact in use they are not separated but they are held together as closely as possible in good heat-conductive relation with the perma gum between to prevent heat, any unnecessary interference [795] with the passage of heat. But the way that the secondary transfer plate does its part in delivering

(Testimony of Norman S. Parker.)

heat from the secondary system to the primary system is by the use of a coil system or a coil structure shown at the left of Plaintiff's Exhibit 8-A-1 and the corresponding system is shown under the tissue paper and surrounded by perma gum in Defendants' Exhibit 117.

The secondary plate—secondary transfer plate—has a coil which appears at Figure 5 of Plaintiff's Exhibit 4-CC-3, the Admiral manual, and running down from that—from the part of the coil which is actually secured to the side of the secondary plate which you can't see there is a vertical duct or a vertical pipe which you will see extending down from the middle of the secondary transfer plate, and you will notice a little reduced portion at the bottom. From that runs tubing across the back and sides of the metal member which I pointed to in Defendants' Exhibit 117, which is part of the moist cold storage compartment assembly.

This little system of tubing has no connection with the primary system at all. It has a volatile refrigerant sealed in it, and that volatile refrigerant never leaves the secondary system. It does, however, assist in the transfer of heat from various parts of the wall of this cooling—moist cold cabinet to the secondary transfer plate, where this heat from the secondary system from the moist cold cabinet [796] is picked up by the primary coil or evaporator expander on the primary plate and is then dealt with by the same cycling or compressor condenser unit that I have described before.

(Testimony of Norman S. Parker.)

In other words, the heat from the interior of the moist cold compartment is delivered partly, at least, to the secondary transfer plate by this closed system of tubing I have discussed, and that heat then is conducted from the secondary transfer plate to the primary transfer plate, and then with the heat from the freezing compartment goes to—goes to the compressor condensing unit and is taken out of the refrigeration system altogether and gotten rid of into the atmosphere, to the interior of the kitchen, or what-have-you, by the compressor condenser unit in the bottom of Defendants' Exhibit 117-A-1.

There is a limited local condensation in this secondary system. That is to say, the refrigerant in this closed system can become liquefied by a drop in temperature and there is a little trap down in the bottom which I pointed out before to the—which I think I will indicate by the word "trap" at the bottom of Exhibit 8-A-1. (Witness marks on diagram.)

The liquid in that trap may be vaporized and it may travel and it does travel as a vapor to the cop coil under certain circumstances.

There is no reason for going into detail on it. [797] What this system is, in my opinion, is merely a method and an evidently efficient method of getting to the secondary transfer plate the heat from the moist cold compartment.

Mr. Byron: Your Honor, I would like to inquire now whether the witness is acting as an expert engi-

(Testimony of Norman S. Parker.)

neer and telling us what that is or if he is going to limit himself to a patent expert and tell us about the patent and its application of the accused device because I assure you if he goes beyond he is going to get some engineering questions.

Mr. Cheatham: Your Honor, I am thinking that Mr. Parker will confine himself to what he is able to ascertain from the service manuals and from the Morton patent 2,586,853 and the patent as a patent expert.

The Court: You are not trying to qualify him as an engineer nor a refrigerating engineer?

The Witness: I will try to be careful to avoid any statement of a fact which I did not get from the Admiral Manuals or from the Morton patent. If I go beyond that it is unintentional and I assure you that that is where my information came from. [798]

Mr. Byron: It is agreeable either way, only I want to know where my limits are in examining him.

The Witness: I make no pretense of being an engineer, as I believe you well know.

The Court: Mr. Parker, you go ahead. If you step over the bounds, Mr. Byron is going to interrogate you as an expert engineer.

The Witness: Which I would not like.

I would like to discuss the system we have been going over in connection with statements in the Morton patent 2,586,853, which is a patent assigned to the Admiral Corporation, on the relation

(Testimony of Norman S. Parker.)

of the primary and the secondary system. Mr. Morton says——

The Court: I think you must before you go into the Morton patent show that the accused structure is the same as the Morton patent. That is what I thought you were going to do.

Mr. Cuningham: If your Honor please, I assured you we would connect that up with the Morton deposition which has not yet been read.

The Court: Does Morton say that the accused structure contains the elements in 2,586,853?

Mr. Cuningham: Your Honor, if we are fortunate, I think we could find it in two or three minutes and read just what he does say. Of course, it is not in evidence. [799]

The Court: Mr. Byron was there when you took the deposition. Is that true?

Mr. Byron: Well, I don't recall. I would tell you frankly if I did know, but, undoubtedly, there are differences. There are some differences. I think, generally speaking, it is true, but there may be many differences about which I do not know.

Mr. Cuningham: My recollection is, your Honor, and I asked him the question, I asked him to pick out from this book of Admiral patents that we have in evidence here the one of the 30 or 40 patents that describe most accurately the Admiral structure, and he selected that one.

Mr. Byron: Oh, yes; I would say that is true. This one out of the 35 patents comes closest to describe it. That may mean it does not describe

(Testimony of Norman S. Parker.)

it at all—it does describe it in part, but merely because it comes closest to it is no sign it is it.

The Court: I am going to permit the witness to testify concerning the Morton patent. It may very well be that I will strike the testimony subsequently, but, in any event, I am sure that you, Mr. Byron, will be able to point out the differences, so we will let him go ahead. Go ahead, Mr. Parker.

The Witness: The Morton patent describes and shows a structure which is possibly different in slight detail from [800] the two physical exhibits about which I have been testifying, but it is certainly exceedingly close and which has the characteristics and shows the greatest and claims the characteristics about which I have been testifying.

For example, in Figure 4 there is a showing of the secondary duct system, which I described, with the primary contact plate masking or on top of the secondary plate. In Figure 3 there is a vertical front-to-rear section which shows the secondary system in the cabinet and the primary system, some of it withdrawn, showing the two contact plates, the primary and the secondary contact plates spaced apart, that indicating a stage in the assembly or disassembly of the machine. In Figure 5 there is a showing of the coil or duct system of the secondary with its contact plate which, if not identical with that on the physical exhibit, is so close to it that I cannot offhand see any difference. In other words, while there may be differences in arrangement of the tubing and in detail of the valve and

(Testimony of Norman S. Parker.)

in proportion of parts, it is my opinion that the Morton patent describes adequately and completely, so far as basic operation is concerned, the structure of the two physical exhibits about which I have been testifying and the structure of Plaintiff's Exhibit 8-A-1.

Now, there is language in this patent which is explanatory of how the system operates, and I would like to [801] read a statement of Mr. Morton's as to the relation between and the thermal communication between the primary and the secondary systems through the two transfer plates. The passage starts with Line 67 at the bottom of Column 8, and I will read:

"Heat is transferred between the primary evaporator 102 and the secondary condenser 64 by means of the thermal communication afforded by the contact plates 104 and 70. These contact plates act as radiating fins for the evaporator coil 104 and the condenser coil 64 to provide an excellent heat transfer. Loss of cold is limited because the contact plates 70 and 104 are surrounded by blankets of heat insulating material which have been omitted from the illustration in Figure 2 so that the parts of the refrigerator and their relation might be seen more clearly."

Then the secondary system is described in considerable detail in Column 4 in terms which read as well on the physical exhibits before us and on Exhibit 8-A-1 as they do on the drawings of the

(Testimony of Norman S. Parker.)

Morton patent 2,586,853. Starting with Column 4, Line 54, I will read:

"Referring now particularly to Figures 4 and 5, it will be seen that the secondary [802] refrigerant circulating system comprises a tubing or coil which may be divided into three sections."

I would like to mark these numbers on Exhibit 8-A-1 in relation to the numbers as they appear in Figure 5 of this Morton patent (marking on exhibit).

"The condenser tubing 64 is brazed——"

The tubing 64 is a tube back of this plate (indicating). The contact plate, secondary contact plate is numbered 70 (drawing on exhibit); the down tube is No. 66 (drawing on exhibit); and I will put a few of these numbers on, and then I will read. Continuing my reading: —I think I will repeat the whole thing for clearness——

"Referring now particularly to Figs. 4 and 5, it will be seen that the secondary refrigerant circulating system comprises a tubing or coil which may be divided into three sections—namely, condenser 64, down tube 66 and evaporator coils 68. The condenser tubing 64 is brazed, soldered, or welded, or otherwise secured in good thermal contact to a contact plate 70 and has its outlet connected to the upper end of down tube 66."

You cannot see this.

"If preferred, the condenser tubing and the contact plate can be made of complementary stampings

(Testimony of Norman S. Parker.)

which would provide a finned contact area and a passageway [803] for the refrigerant.

"The lower end of the down tube 66 is provided with a T-union or joint 72 which is connected to the lower end of the secondary evaporator coils 68. The coils 68 are shaped at their lower ends to provide, with the down tube 66 and the union 72, a well 74 for the entrapment of liquid refrigerant to assist in preventing reverse flow of gaseous refrigerant. Also, the evaporator coils 68 are sloped so that gaseous refrigerant will circulate to the condenser, and the condenser coil is similarly sloped to direct liquid refrigerant into the down tube 66. Further to prevent reverse flow the down tube 66 is interiorly fitted with a plate or strip 76 (Figs. 7 and 8) having regularly spaced perforations extending its entire length."

That is shown here (indicating on exhibit). I will omit from Line 6 through Line 12 of Column 5 of the patent and start quoting on Line 13:

"When the secondary system is mounted on the liner 42 the secondary evaporator coils 68 are firmly held against the outer face of the wall of the liner 42 by suitable fastening means 80."

Then I will omit from that end of Line 16, I will [804] omit the beginning and read the middle line of 22:

"Fig. 4 shows the secondary evaporator coils 68 to extend over a substantially large portion of the food compartment liner 42 and to be spaced and arranged so as to provide the optimum heat trans-

(Testimony of Norman S. Parker.)

fer between the secondary system and the liner 42 consistent with good manufacturing processes. Once the evaporator coils 68 have been mechanically secured to the outer face of the liner wall, a heat transfer agent such as is filled in between the tubing and liner and around the tubing to increase the effective heat transfer. Such a transfer has high thermal conductivity and may be a soft non-oxidizing material impregnated with aluminum flakes, graphite and the like."

I omit the middle of Line 36 and start again at 41:

"The secondary evaporator system is charged with a liquid refrigerant through a charging tube 82 which is connected to the upper end of the down tube 66. When the proper amount of refrigerant has been placed in the coils of the secondary system, the charging tube 82 is pinched and sealed at 84. After the coils of the secondary system [805] have been charged with refrigerant and have been mounted upon the liner 42 and thermally secured there against, the secondary system should require no further servicing and with the liner 42 may be permanently installed in the refrigerator cabinet."

The system just described in the part of the patent I have read is precisely as shown or as present in Defendants' Exhibit 117. The down tube extends from the middle of the secondary transfer plate, and the T that is described is located down at the bottom. There are differences in proportion and shape to some extent, but I think that it is

(Testimony of Norman S. Parker.)

proper to say that this structure works precisely as described in Mr. Morton's patent. I would like to quote from Mr. Morton's patent a proper description of the structure about which I have testified in connection with 117-A which shows the primary system, and here I will have to talk in terms also of Plaintiff's Exhibit 8-A to some extent.

Starting Column 6 of the patent, Line 15:

"The evaporator 94 is divided into two sections; one section 100 comprises a tortuous section of tubing firmly secured to the freezing locker liner 40 by suitable fasteners 101—similar to the fasteners 80 used to secure the [806] secondary evaporator to the liner 42. The other portion 102 (indicating on drawing) is brazed, soldered, welded, or otherwise secured in good thermal contact to a second contact plate 104 which is secured in face-to-face heat-exchange relationship to the secondary system contact plate 70 by means of suitable bolts 106 provided with nuts 108; the heads of the bolts 106 are welded to the contact plate 70 and extend through suitable openings 107 in the contact plate 104. In order to obtain a maximum heat transfer between the contact plates, they are coated with a layer of a heat-transfer agent such as that used in conjunction with the evaporator coils 68."

That is the connection of the two plates 70 and 102.

Mr. Cunningham: The evaporator coils?

The Witness: "The capillary tube 92 (drawing on exhibit) is connected to tube 110 forming the

(Testimony of Norman S. Parker.)

inlet end of the evaporator 94 (indicating on plat) of the primary system. The tube 110 is provided with a solenoid-operated flow-resisting valve 112 which is more fully described in the copending application of Evans T. Morton and George R. Heidenblut, Serial No. 719,670, filed [807] January 2, 1947, for an invention entitled 'Restricting Valve.' The purpose of this valve will be explained more fully hereinafter, but in general its function is to increase the resistance to flow of refrigerant through the tube 110 to such an extent that the refrigerant will be diverted through the evaporator coil 102.

"The inlet end of the evaporator coil 102 is connected to the tube 110 at 114, which is a point ahead of the valve 112——"

And the point 114 is right there (indicating on exhibit)——

"and the first portion of the coil 102 comprises three semi-circular portions 116, 118 and 120 connected in series."

I may say that is true. Plaintiff's Exhibit 8-A-1 is exceedingly close so far as the features I have just marked, if not identical, to the showing, Figure 4, of this Morton patent.

"The last semi-circular portion 120 is connected to tubing 122 which is welded, brazed or otherwise secured in good thermal contact to the face of the contact plate 104. The tubing 122 is flattened somewhat (see Fig. 14) to increase the area of contact between the tubing [808] and the plate 104 to an

(Testimony of Norman S. Parker.)

amount greater than if the tubing were left in its cylindrical shape, thereby to increase the heat-transfer efficiency between the primary evaporator 102 and the secondary condenser 64. At its outlet end the evaporator coil 102 is provided with another semi-circular portion 124 (drawing on exhibit) which terminates in a junction at 126 with the tube 110."

Here is the junction (drawing on exhibit).

"The evaporator coil 102 is thus secured in the primary system in parallel with the valve 112. When the temperature in the moist cold compartment 14 is higher than that for which the thermostat control 90 has been set, the solenoid valve 112 will be positioned or closed so as to increase the resistance to flow of refrigerant through the tube 110."

In other words, you have an alternative system where there is a different path which the refrigerant can take across the primary plate 104, and I want to emphasize again that the only connection described or shown in the patent or these manuals from which heat can actually be taken away from the secondary compartment is the thermal connection between the contact plates 70 and 104 [809] which is the heat conductivity between the two plates being so highly stressed by Mr. Morton and by these sales manuals.

Q. (By Mr. Cheatham): In your opinion, does the patent closely describe the primary refrigerant system of Defendants' Exhibit 117-A? By the

(Testimony of Norman S. Parker.)

patent I mean the patent for Morton No. [810] 2,586,853.

A. The differences are very slight. A somewhat different form of condenser is shown in the patent. The condenser shown in the patent is, I would take it to be, a finned tube condenser as in Fig. 2 of the patent, the coil—the condenser coil seems to be shown provided with fins. You can see the fins end-wise or end-face, rather, in Fig. 2 of Morton and again in Fig. 3 of Morton. The condenser of the Exhibit 117-A is somewhat different type of condenser in which a pair of plates—or, rather, I think it's a single plate system with a duct fastened to the plate is provided with louvers or holes so that air can circulate through it. And the function of the condenser can be performed, that is, the air passing over a large heat transfer surface takes enough heat out of the refrigerant so that the refrigerant which is a hot gas when it enters the condenser is reduced to a liquid.

Outside of details of that kind there is very little difference. There are slight differences in the arrangement of the tubing on the primary contact plate and on the arrangement of the little valve to which I am pointing. But so far as I can answer it, in my opinion, the differences are exceedingly slight and not enough to affect the applicability of the general statements made in the patent.

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No. 15057

United States
Court of Appeals
for the Ninth Circuit

MOIST COLD REFRIGERATOR CO., INC., a Corporation,

Appellant,

vs.

LOU JOHNSON CO., INC., a Corporation; MEIER & FRANK COMPANY, INC., a Corporation; ADMIRAL CORPORATION, a Corporation, and AMANA REFRIGERATION, INC., a Corporation,

Appellees.

Transcript of Record
In Four Volumes

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Volume III
(Pages 807 to 1204)

Appeal from the United States District Court for the District of Oreg

Phillips & Van Orden Co., 870 Ivanhoe Street, San Francisco, Calif., 6-29-56

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Volume III
(Pages 807 to 1204)

Appeal from the United States District Court for the District of Oregon

Phillips & Van Orden Co., 870 Brannan Street, San Francisco, Calif. -6-29-56

(Testimony of Norman S. Parker.)

Q. (By Mr. Cheatham): What is the number of the condenser in the Morton patent, and will you refer to the chart? To save time—— [811]

Mr. Byron: Well, now, let him testify.

The Witness: Let me read from the bottom of Column 5:

"The primary system is clearly shown in Figs. 2, 3, 4 and 6, and include the refrigerant liquefying or condensing means or unit 36 consisting of a combination motor compresser unit, 35, and a cooling condenser 37."

I may say that the showing of the motor compressor and the condenser in Plaintiff's Exhibit 8-A-1 is very close to the showing in Figs. 2 and 3 of the Morton patent.

Q. (By Mr. Cheatham): Does the Morton patent 2,586,853 show a refrigerator having a freezing compartment and a moist cold compartment?

Mr. Byron: Now, your Honor, I am objecting seriously. The accused devices are right before the Court and the jury and counsel, and the test is whether or not that accused device is infringing a claim and whether or not that claim is valid. Now, I think it's improper to apply a claim to the Morton patent 2,586,853 in connection with which the witness has stated there are differences.

Mr. Cheatham: We will get to that question.

Q. Mr. Parker, referring to Claim 2 of Bronaugh and Potter Reissue Patent 23,058, do you find that the Admiral refrigerator comprised a household refrigerator which in normal operation provides above freezing moist cold air for preserv-

(Testimony of Norman S. Parker.)

ing in the [812] refrigerated condition foods susceptible to moisture loss by evaporation and below freezing dry cold air and a dry cold surface for preserving foods in a frozen condition?

A. Read the question, please.

The Court: Just the first five or six lines of Claim 2 of the reissue patent.

The Witness: Well, the first five lines of the Claim 2 of the reissue patent are properly descriptive of the Admiral structure about which I have testified. It has an above freezing moist cold air compartment and a below freezing dry cold air compartment with a dry cold surface for preserving foods in a frozen condition.

Q. (By Mr. Cheatham): Would you point out to the Court and the jury those elements in the Admiral refrigerator, Exhibit 10-A, and supplement that by using Exhibit 9-A-1?

A. The Exhibit 10-A of which I have just opened the door has an upper compartment closed by a pair of doors, and I notice that on one of these doors there is the wording "Dual-Temp Sub-Zero Locker." This locker with this assembly is the — it's shown in — broken-down or taken-down condition in Defendants' Exhibit 117-A.

In other words, you see the back of a liner and if you look in the front you would see a liner which is exactly the same as what has been described on this machine as a sub-zero locker. And this is, as a matter of fact, a [813] sub-zero locker and the refrigeration coils shown around the exposed sleeve

(Testimony of Norman S. Parker.)

provide for a cold or below freezing temperature. Whether it's sub-zero or not depends upon how the user wishes to set it.

The lower larger compartment has a liner which corresponds to and, so far as I can see, is substantially identical with the liner of Defendants' Exhibit 117. It seems to be shaped the same, so far as I can tell without making accurate measurements. It is a liner of the opening which is the same as the liner of the complete Admiral refrigerator which I am now pointing to.

I notice that on the front of the cabinet is a dial—movable or control dial marked "Warm" or "Off," "Colder" and opposite it in larger letters are the words "Moist Cold." Taking that in relation to the patent—the Morton patent in which I have been reading, and from statements in the service manual of the Admiral Dual-Temp refrigerator, Defendants' Exhibit 4-CC-3, I think it's beyond argument that this Admiral Dual-Temp refrigerator has also a moist cold compartment.

The Court: Go ahead.

Q. (By Mr. Cheatham): Mr. Parker, would you continue reading the elements of the Claim 2 on the Admiral refrigerator exemplified by the structure illustrated on Plaintiff's Exhibit [814] 9-A-1?

A. Continuing to read from Claim 2, after the part that was read in the question, are the words:

"Said refrigerator comprising a cabinet having a cooling compartment and a freezing compartment."

(Testimony of Norman S. Parker.)

A cooling compartment is the lower compartment of the showing of the Admiral refrigerator in Plaintiff's Exhibit 9-A-1. The freezing compartment is the upper compartment of that showing.

The claim further says:

"Thermal insulation around said compartments thermally insulating said compartments from each other and from the outside atmosphere."

The service manual and the description of the patent are clear and without destroying that box or taking it apart I think we could properly assume that there is insulation as shown—as omitted from the view in the Plaintiff's Exhibit 9-A of the Admiral box, and that this insulation surrounds both cooling compartments and also separates them.

The next statement in the claim is "a cooling refrigerant expander having heat-conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees Fahrenheit while withdrawing heat from said [815] compartment."

The further statement: "Whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees Fahrenheit and is maintained at a humidity whose relative value is at least 100 per cent at 32 degrees Fahrenheit." That is a long statement.

To go back to the beginning of it, "a cooling refrigerant expander having heat-conducting surfaces within the cooling compartment." The transfer

(Testimony of Norman S. Parker.)

plate—the primary transfer plate about which I have testified and which is marked 104 on Plaintiff's Exhibit 8-A-1 is the only means for abstracting heat from the secondary or the moist cold compartment. Its heat transfer—its heat-conducting surfaces within the cooling compartment are the actual heat-conducting surfaces of the liner itself which conducts heat to the expander on the primary plate 104.

In other words, the entire secondary system with its inner liner surface exposed to the materials to be cooled in the moist cold surface is merely a heat transfer system for delivering the heat to be removed to the coil on the primary plate 104, and this heat-conducting surface is within the cooling compartment and abstracts heat from the cooling compartment and its area and its relationship to the capacity of the machine are such as is amply pointed out in the Admiral manuals that a moist cold is maintained and at that time air is maintained as sufficient humidity to provide a moist cold [816] compartment.

Now, the question of the definition of the language of the claim that the air should be maintained at a humidity whose relative value is at least 100 per cent at 32 degrees Fahrenheit is another way of saying that at the range of use which may be of the order of 38 to 42 degrees Fahrenheit the moisture will be sufficiently high so that if that air temperature were dropped to 32 degrees Fahrenheit the

(Testimony of Norman S. Parker.)

humidity would have a relative value of at least 100 per cent.

It's a long way of saying that a moist cold is maintained in the moist cold storage compartment.

The next limitation is a freezing refrigerant expander having heat-conducting surfaces within the freezing compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature well below 32 degrees Fahrenheit while withdrawing heat from said compartment whereby air in said freezing compartment is cooled thereby to a temperature well below 32 degrees Fahrenheit.

The structure or the part of the Admiral structure which responds to that limitation of the claim is, of course, the sleeve to which I am pointing in Exhibit 117-A, which is about its exterior in heat contact relation there with a system of ducts and cooling ducts through which the refrigerant is circulating at pressures which are effective to taking up heat out of the freezing compartment to maintain the freezing [817] compartment at a temperature well below 32 degrees Fahrenheit. And it is so described in the Admiral manual.

The next limitation is a single liquefying unit associated with said expanders and constructed and arranged to condense refrigerant expanded by heat extractor from both said compartments, the volatile refrigerant circulating through said expanders being the sole heat-extracting medium. The Admiral Dual-Temp has a single compressor condenser unit to which—to the suction to the low side of which

(Testimony of Norman S. Parker.)

flows the refrigerant which has been evaporated both in the coil or the duct which takes heat from the freezing compartment, and in that part of the primary expander which takes heat from the cooling compartment and no other means are shown for extracting heat from those two compartments.

There is but a single liquefying unit which performs that function for both compartments, and the volatile refrigerant which circulates through these two expanders is the only volatile refrigerant which takes heat to the compressor condenser unit, there to be discharged from the system before the refrigerant returns to continue its operation.

The final statement is "And a thermostat responsive to the temperature in one of said compartments controlling the operation of said liquefying unit." I should have said that there is a provision for a thermostat bulb on the outside of the sleeve at the top of Defendants' Exhibit 117-A, and [818] it is clear both from Mr. Morton's patent and from the showing of the manuals of Admiral that that thermostat is responsive to the temperature, for example, of the cold compartment, and that it controls the operation of the liquefying unit, the motor compressor condenser.

Q. (By Mr. Cheatham): In your opinion, does the Admiral refrigerator come within the terms of Claim 2 of the Bronaugh and Potter Reissue Patent 23,058? A. In my opinion, it does.

Q. Would you make the same analysis with re-

(Testimony of Norman S. Parker.)

spect to Claim 1 of the Bronaugh and Potter Reissue Patent 23,058?

A. I think there is no need to go through the various statements in the Claim 2 because they are all in Claim 1. I will merely mention the addition of statements in Claim 1. At Line 31, the following statement:

"Air in said cooling compartment having a substantially stable temperature of about 40 degrees Fahrenheit and having humidity whose relative value is at least 100 per cent of 32 degrees Fahrenheit."

In the Admiral structure with the upper compartment operating as a freezing compartment and the lower compartment operating as a cooling compartment, the air in the cooling compartment can be kept at a temperature and normally is kept at a temperature somewhere in the neighborhood of 40 degrees [819] Fahrenheit.

Of course, I should say that whether it is precisely at 42 degrees Fahrenheit or a few degrees above or a few degrees below is a matter of adjustment. [820]

Assuming that it is kept in that range and since there is no frosting, refrigerating element, no frosting in the compartment, the air will be maintained at a humidity, if it is at 40 degrees Fahrenheit, which is such that a drop in temperature of the air to 32 degrees Fahrenheit would raise its humidity to a relative value, in my opinion, of at least 100 per cent. In other words, air at 40 degrees

(Testimony of Norman S. Parker.)

Fahrenheit will hold more moisture than air at 32 degrees Fahrenheit, and as the air drops in temperature it loses its ability to hold water, to hold moisture, and if it is maintained at a relative humidity of, say, 85 at 40 degrees Fahrenheit, if my memory is correct and there are of course tables to establish such matters, the relative humidity at 32 degrees Fahrenheit would be at least 100 per cent; therefore, that feature of the claim is also present in the Admiral structure, and the air in the Admiral cooling compartment will have those characteristics. The claim goes on to say that air in the freezing compartment having a temperature well below 32 degrees Fahrenheit. Of course, that will obviously be true if the freezing compartment operated, and is able to operate as a freezing compartment.

The Court: Mr. Cheatham, what claims do you say were infringed by the accused structures? [821]

Mr. Cheatham: All four of them, sir.

The Court: Claim No. 2 is your broadest claim, isn't it?

Mr. Cheatham: I believe it is.

The Court: Are you contending now that even though the accused structures may not infringe Claim No. 2 that they might infringe 1, 3 and 4; is that right?

Mr. Cheatham: No, sir; if they infringed Claim 2, they might not infringe 1, 3 and 4. If they infringe Claims 2 and 1, they might not infringe 3 and

(Testimony of Norman S. Parker.)

4. If they infringe Claims 2 and 4, they might not infringe Claims——

The Court: I thought if they infringed Claim 2 they would infringe all of the claims?

Mr. Cheatham: Not necessarily, sir, because there are other limitations in Claims 1, 3 and 4 which are not present in Claim 2.

The Court: So if they infringe Claim 1 they would obviously have to infringe Claim 2?

Mr. Cheatham: That is right, sir.

The Court: If they infringe Claim 3, they would have to infringe Claim 4?

Mr. Cheatham: Yes.

The Court: So you think it is desirable and necessary to go through each claim separately?

Mr. Cheatham: Just to extent that Mr. Parker would [822] emphasize the difference between the claims which are present in the claims.

The Court: Go ahead.

Q. (By Mr. Cheatham): Mr. Parker, does the Admiral refrigerator infringe the Bronaugh-Potter Reissue Patent 23,058 as you read?

A. In my opinion it does.

Mr. Byron: Of course, that is a conclusion of law. I object to that.

The Court: Yes. As I explained several times, Mr. Parker being a patent expert has the right to express his opinion. The jury does not have to agree with it, but he has the privilege of making that statement.

Mr. Byron: He cannot give a conclusion of law.

(Testimony of Norman S. Parker.)

He can say, "In my opinion, the accused device comes within the terms of the claims," but he cannot say that, "In my opinion, this is an infringement."

Mr. Cuningham: I think that is what Mr. Parker is really saying.

The Court: It is just a question of semantics. In other words, perhaps he did not say it as technically correct as a patent lawyer would, but we all know that this is his opinion, and he thinks the structure is infringed.

Q. (By Mr. Cheatham): May I in order to have the record [823] straight state the question in this fashion:

In your opinion, does the Admiral refrigerator come within the terms of Claim 1 of the Bronaugh-Potter Reissue Patent 23,058?

A. In my opinion, it does.

Q. Would you repeat the same analysis with respect to Claim 4 of the Potter-Bronaugh Reissue Patent 23,058?

A. To save time, I will omit from Claim 4 the features or characteristics about which I have already testified and which I have stated in my opinion are present in the Admiral structure and will limit myself to the differences.

At the end of the claim is the limitation of a thermostat responsive to the temperature in the cooling compartment and controlling the on-off cycles of the liquefying unit, and the insulation around said cooling compartments offering less resistance to flow

(Testimony of Norman S. Parker.)

of heat thereto from the outside atmosphere than as does the thermal insulation of the freezing compartment to insure starting of said liquefying unit by heat flow into said cooling compartment during an off cycle of said liquefying unit before the temperature in said freezing compartment approaches a non-freezing value. Now, that Claim 4 therefore differs from Claims 1 and 2 in that it specifies what we might call differential insulation, and also specifies a thermostat which is responsive to the temperature in the cooling compartment. The [824] thermostat—considering that is a thermostat—the thermostat in the Admiral structure has a bulb which is on the outside of the freezing compartment and which therefore responds directly to the temperature of the freezing compartment, but that bulb is located close to a bend of the expander, and the expander carries refrigerant across and from the primary plate. There is not any doubt that there is a difference here between the operation of the Bronough-Potter patent where you simply see a thermostat in the moist cold compartment. I notice, however, that Mr. Morton in his Patent 2,586,853 says——

The Court: Well, I think that that is not proper, Mr. Parker. If you are explaining the accused structure, you have got to give us the offending part in the accused structure and not in Mr. Morton's patent.

The Witness: No, the offending portion is in the accused structure, but what Mr. Morton says

(Testimony of Norman S. Parker.)

about how this structure works is a part of what controls me in my opinion. In other words, Mr. Morton describes the operation of the structure of the Admiral refrigerator and of Defendants' Exhibit 117-A.

The Court: It is your representation that this structure before you is the identical structure or at least operates identically with that described by Mr. Morton in his patent with reference to the feature about which you [825] are now testifying?

A. That is the opinion that I have. I am speaking now as a reader of this patent and not as a refrigerating engineer. I could be wrong, but, so far as I understand the patent, I understand the structure, the statement of the operation in the patent will apply to this structure.

The Court: If you are of the opinion that it is the same, go ahead.

The Witness: In Column 9 of the Morton Patent 2,586,853, starting with Line 33, I will read:

"Since, however, the thermostatic bulbs are placed in positions outside of the compartments themselves, that is, on the outer walls or adjacent the outer walls of the compartments, they reflect the temperatures of the circulating refrigerant as well as the temperature within the compartments. The system will cycle on and off until the temperature in the moist cold compartment and the temperature in the freezing locker are reduced to within the range desired."

And so I take that statement to apply to this structure and to be a statement that as long as either

(Testimony of Norman S. Parker.)

of these compartments are calling for refrigeration they will get it.

Now, there are some contrary statements in [826] the service manual in the patent, and, in all frankness, I should say that the theory of the other side is going to be that the only response of the thermostat is to the temperature in the freezing compartment, and I am expressing the opinion based partly on my inspection of the system and partly on what Mr. Morton says in his patent and partly on the necessities of the problem, I am expressing the opinion that when the cooling compartment really needs refrigeration it is going to get it, and that to some degree and to an important degree the thermostat which operates the cycling system responds not only to the temperature needs of the freezing compartment but also to the temperature needs of the cooling compartment.

The Court: Mr. Parker, I might say now that I am going to permit Mr. Byron to interrogate you as an expert engineer because you have expressed opinion which go beyond that of a patent expert into the opinion of an engineering expert.

The Witness: No, my opinion as to why that had to be that way was I could not conceive as a user of electrical refrigeration for the last 20 years of anyone such as Admiral putting on the market a refrigerator which would have a moist cold compartment or any kind of storage compartment which would get so warm that the food would spoil, and

(Testimony of Norman S. Parker.)

unless there is some response to the temperature in the [827] moist cold compartment I do not see how the machine can operate. I do not express an opinion as an engineer. I am not an engineer, and I am expressing that opinion on the basis of my own use for 25 years of electric refrigeration.

The Court: Go ahead.

The Witness: I was discussing also in the claim the thermal insulation. The thermal insulation, the differential, I do not offhand see in the Admiral structure. I believe that it is indicated in the cover by a differential size of sleeve in the cover of the Admiral circular or service manual, Plaintiff's Exhibit 4-CC-3, but it does show up very clearly in the Amana box, 10-B, where you can see the difference in thickness of insulation with thicker insulation in the freezing compartment (indicating Exhibit 10-B). I understand indirectly that there is some stipulation in the case that the operation of the Amana and the Admiral boxes are substantially the same, but if I am correct in that assumption and if there is differential insulation used by the Admiral box, as I understand that there is, why, then it would fall within the terms of the passage that I have read at the end of Claim 4.

Mr. Byron: I would like to know whether or not the witness is testifying that there is differential insulation or there is not. [828]

The Witness: In the box?

Mr. Byron: In either one. You say you assume. Is there?

(Testimony of Norman S. Parker.)

The Witness: I don't know whether or not there is a differential insulation in the Admiral refrigerator—let's get the exhibit number, Plaintiff's Exhibit 10-A—I do not know whether or not there is differential insulation in it. I am satisfied from looking at Plaintiff's Exhibit 10-B, the Amana refrigerator, that there is.

The Court: I think your testimony is clear on this. He says he finds it in the Amana but not in the Admiral because he does not know whether it is in the Admiral or not.

Q. (By Mr. Cheatham): Then, in your opinion, does the Amana refrigerator come within the terms of Claim 4 of the Brenaugh-Potter Reissue Patent 23,058?

A. Yes; if my understanding is correct that the parties have stipulated that the two refrigerators operate substantially the same.

Mr. Byron: Operation and construction are two different things, your Honor.

Mr. Cuningham: If your Honor please, I have been assuming that was all settled in our pre-trial order that Amana or the Dual-Temp box could be taken as equivalents for purposes of this case. Am I wrong in that assumption? [829]

The Court: In what item is the stipulation contained?

Mr. Byron: We do not care anything about the proportional insulation anyhow, but I am just saying they are not proving a case of infringement even on that point.

(Testimony of Norman S. Parker.)

Now, what the stipulation was was this: That if the Admiral infringed a valid claim of the patent in suit, so does Amana; but if the Admiral does not infringe, Amana does not. Now that is the stipulation.

The Court: If it is shown, in other words, that Admiral infringes any of the four claims as made, then the jury can find that the Amana infringes?

Mr. Byron: Yes.

The Court: Does the stipulation cover the fact that an element may be present in Amana that is not present in Admiral?

Mr. Byron: No, it does not.

Mr. Cuningham: If your Honor please, there is no testimony that relative or proportional insulation is not present in the Admiral box. The testimony, as I understood it, was that Mr. Parker did not now know, and I think it is up to us to complete the testimony.

The Court: Very well. In other words, as part of your case in chief you will have to show that the Admiral has an offending type of insulation in order to show the infringement of Claim No. [830] 4?

The Witness: I have testified that I do not know whether or not there is differential insulation in the Admiral box.

The Court: I think that the witness should be permitted to express an opinion that, assuming there is such differential insulation, does he in his opinion believe that the claims are infringed.

(Testimony of Norman S. Parker.)

Q. (By Mr. Cheatham): Assuming that there is such differential insulation in the Admiral refrigerator, would it be your opinion that Claim 3 of the Bronaugh-Potter Reissue Patent 23,058 is infringed? A. That would be my opinion.

The Court: Would your answer be the same for Claim 4, making the same assumption?

The Witness: As to the Claim 4, making the same assumption, it would be my opinion that the Admiral box would be within its terms.

The Court: That covers it as far as an expert is concerned. Do you have any other testimony?

Mr. Cheatham: Yes, your Honor.

The Court: About how long?

Mr. Cheatham: I have perhaps 15 or 20 minutes, perhaps a half-hour.

The Court: Go ahead.

Q. (By Mr. Cheatham): Mr. Parker, are you familiar with the [831] patent to Anderson, No. 1,439,051?

A. I have read it several times.

Q. I refer you to Plaintiff's Exhibit 16-B and ask you if that is an enlargement of a portion of the patent for Anderson, 1,439,051? [832]

A. Plaintiff's Exhibit 16-B is an enlargement of Figure 1 of Anderson Patent 1,439,051.

Q. (By Mr. Cheatham): What, if any, teaching in the Anderson patent is there maintaining a moist cold atmosphere in the cooling compartment?

A. There is no discussion or no statement in

(Testimony of Norman S. Parker.)

Anderson relating to the moisture content of the air in any part of the device.

Q. What, if any, teaching is there in the Anderson patent 1,439,051 as to a nonfrosting coil in the cooling compartment?

A. Nothing is said in the patent about a nonfrosting coil so far as I can remember.

Q. What, if any, teaching is there in the Anderson Patent 1,439,051 of means for preventing frosting in the cooling compartment?

A. Nothing is said about it.

Q. What, if any, teaching is there in the Anderson Patent 1,439,051 as to the disadvantage of frost accumulation on the coil in the cooling compartment?

A. There is no discussion of it in the Anderson patent at all.

Q. What, if any, teaching is there in the Anderson Patent 1,439,051 as to proportional insulation?

A. You mean differential insulation?

Q. Differential insulation. [833]

A. Nothing in the patent about it. The insulation about both compartments, so far as I can tell from the drawing, is of the same thickness and there is no discussion in the patent of any variation or no teaching of any variation of the thickness of insulation.

Q. Is there a frosting coil in the cooling compartment of the Anderson patent 1,439,051?

A. Yes. In my opinion it would frost some.

(Testimony of Norman S. Parker.)

The Court: I didn't hear what you said.

The Witness: It will frost to some degree or to some distance in the upper box. The coil or the pipe which, I believe, is numbered 41, goes up into the upper box. In my opinion, it would frost.

Q. (By Mr. Cheatham): Do you have any knowledge as to whether the coil on the Anderson Patent frosts?

A. Well, I know that Mr. Anderson said that it did, the inventor.

Mr. Byron: Objected to as hearsay.

Mr. Cuningham: If your Honor please, I think we had better ask the witness a few more details about that, but my understanding is that this was—the occasion was the hearing of the testimony of Mr. Anderson in court on this very subject.

Mr. Byron: We weren't there. We weren't there to cross-examine.

Mr. Cheatham: Mr. Parker—— [834]

The Court: Objection is sustained.

Mr. Cheatham: Your Honor, we have a long hypothetical question and I want to know if the witness' qualifications to answer the question will be stipulated by the opposing side, or shall we——

The Court: We have already stipulated Mr. Parker's qualifications. He is a patent expert.

Do you have a copy of the question that you are about to propound to him?

Mr. Cuningham: Yes, sir.

The Court: All right.

Now, will you give one to Mr. Byron and let

(Testimony of Norman S. Parker.)

him take a look at and while the question is being asked if you have an extra copy—you have no extra one? I will listen.

Mr. Cuningham: Yes, I think we have.

The Court: Mr. Parker, are you well-acquainted with the question that is going to be propounded to you?

The Witness: I have heard it read once.

The Court: Well, if that's all you have read it you had better take another copy and read it as they are reading it to you.

Mr. Cuningham: I think he is just a little modest, your Honor. He has heard parts of it at different times.

The Court: Is this your last question to Mr. Parker?

Mr. Cheatham: I have just discovered that I skipped one question, and then I want to ask him a question about [835] his interest.

The Court: About what?

Q. (By Mr. Cheatham): Mr. Parker, have you read the patent of Morton, 2,586,853, which is in the book of Admiral patents, Exhibit 19, and it is marked 19-CC?

A. May I see? Have you got a copy of it?

Q. Which patent relates to a gasket for the door of the refrigerator?

(Bailiff hands the document in question to the witness.)

(Testimony of Norman S. Parker.)

A. Yes, I have read this patent, Morton 2,586,853. Refrigerator door gasket.

Q. (By Mr. Cheatham): Mr. Parker, assume that a valid hypothetical question——

The Court: Just one moment. Ask him all the questions except this one because I want to go over this question with you and with counsel before it's submitted to the witness.

Q. (By Mr. Cheatham): Mr. Parker, do you have any interest in the outcome of this litigation?

A. No, none whatever.

Mr. Cheatham: That is all, subject to the question which your Honor has.

The Court: Ladies and gentlemen, it is now almost 4:15. There is one long question which will be propounded to Mr. Parker tomorrow, after which Mr. Parker will be subjected [836] to cross-examination. As you know, we will have testimony tomorrow and Wednesday after which we will recess until the following Monday. I know you have all followed the admonition not to discuss this case with anyone else or come to a conclusion as to how the case may be decided, and I urge you to continue the good work.

Now, you are excused until 9:30 tomorrow morning.

(Whereupon the jury was excused and the following proceedings were held out of the presence of the jury:)

The Court: Mr. Byron, have you read this question?

Mr. Byron: No, I haven't. I will do so now.

The Court: I might say right now that I hoped that we would be able to agree on the question to be propounded to Mr. Parker. It's 4:15 now and it seems to me it may take some little time; however, I do want to suggest that perhaps Mr. Byron and Mr. Cuningham can get together and agree on some of the elements of the question, and if there is any disagreement then I would be willing to pass upon it tomorrow morning. But I may be incorrect in this, but I can't see on the question of a fair royalty the relevancy of the fact that this was originally tried before a Court and then reversed and the reissue patent granted and go into the whole history of it, and I certainly don't see the relevancy of the fact that Admiral charges 2½ per cent for a rubber gasket that [837] they are manufacturing. That may be more or less than what should be charged for a refrigerator.

The question of the impact which this refrigerator may have made on the market, I think, probably is relevant. It appears to me that what they are trying to show is that this was a fundamental and basic invention. Now, that may be true or it may not be true, but I don't think it goes to the propriety or impropriety of the question. That is something that can be brought out on cross-examination by your other witnesses.

Of course, if you destroy the basis of the witness' answer, that's just part of the case, but—so I am merely saying that I think the history of the invention is applicable and what impact it made on

the market is applicable, but I do not see the relevancy of the court proceedings nor of the gasket that was charged by Admiral.

Now, it may very well be that you can show that for some similar patents, General Motors or General Electric, that they pay 10 per cent or some other figure. The only thing that disturbs me is, aren't we getting into a situation in which we are going to have to evaluate the fundamental character of these other patents upon which royalties are made?

Now, I assume that some of you may have had experience in propounding similar questions to witnesses in [838] other cases; however, there is this one difference: I think both of you men have confined your activities primarily to trials before the Court, and that which may be proper before a Court or that which may be received by a Court doesn't necessarily mean that that same testimony should be submitted to the jury, because theoretically, at least, the judge is in a position to separate the wheat from the chaff and not be affected by hearsay or things which may only have a remote connection to the problem. Therefore, in a hypothetical question propounded to a jury, I am going to have to rule much more strictly than if that same question was propounded to me sitting as the Court.

With this general background I hope, Mr. Cunningham and Mr. Cheatham, you will be able to talk and arrive at an agreement with Mr. Byron. I will be down here tomorrow morning not later than

9:00 o'clock and if you want to see me at that time I will be glad to hear you.

Mr. Cuningham: All right.

The Court: Recess till tomorrow morning at 9:30.

(Whereupon, at 4:20 o'clock p.m. an adjournment was taken until 9:30, Tuesday, November 22, 1955.) [839]

Tuesday, November 22, 1955, 9:20 A.M.

(Proceedings herein were resumed, pursuant to adjournment, as follows:)

(After discussion between Court and counsel in chambers the following proceedings were had on the record:)

The Court: Do you want to specify the reasons why you believe that the question is improper?

Mr. Byron: I think we will bring that out on cross-examination.

Mr. Cuningham: I think we should make a record now, your Honor.

Mr. Ramsey: He wants you to make your objection to the question if you want to make your record.

Mr. Byron: Oh, yes; we make our objection now to the hypothetical question because there are assumptions stated therein that have not been proven.

Mr. Cuningham: Specify them.

The Court: We want specificity here. In open court we are going to permit you to make the objection in the manner which you have just made.

Mr. Byron: It has not been established that the accused device has a cooling refrigerant expander having heat-conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a [840] temperature of above 32 degrees Fahrenheit.

(Discussion off the record.)

The Court: I did not think the matters Mr. Byron was putting in had any relevancy to the issue involved. If you want to make your record, you may, but not on the question of the validity of some other patent.

Mr. Byron: All right. The objection is on the basis that it has not been established that the refrigerators covered by the Potter patent were not the first to provide a single compact unit for household use, a compartment for the preservation of frozen food in a moist cold atmosphere above freezing temperature, and a separate compartment for freezing and preserving other foods safely for long periods of time in frozen state at temperatures substantially below the freezing temperature. Also, the record does not show that such Potter refrigerators for the first time brought refrigeration of the kind claimed to the home—the first time, that is.

We object also to the statement that the Potter refrigerator for the first time provided a household unit wherein without the use of covered pans the moisture of the food stayed in the food instead of being dried out.

We also object on the ground that the hypothetical question states that the Potter refrigerator elim-

inated a frosting and defrosting of the chilling element in the [841] compartment for the preserving of foods at temperatures above freezing.

We also object on the ground that the statement in the question is that such Potter refrigerators constitute the first major improvement in refrigeration in many years.

We also object to the statement that the Potter refrigerator—that in such Potter refrigerators the transference of odors from one kind of food to another is minimized.

We also object that such Potter refrigerators cal question that the Potter refrigerators constitute a brand new idea in refrigeration and that the Potter refrigerator is just not a new model.

We also object that such Potter refrigerators possess such advantages that they are sold largely as replacements for conventional refrigerators.

Object to the statement in the hypothetical question that such Potter refrigerators afford larger possibility of profit per unit to the manufacturer or his distributors and that said refrigerators have the retail value based upon any Potter invention and that they are not more profitable than the conventional refrigerators of comparable size.

We also object to the statement in the hypothetical question that the conventional refrigerators which had been produced in the United States in and prior to 1931 dried out [842] the natural moisture of the foods stored therein because of the frosting of the chilling element within the food

chamber and that said fact had existed from the beginning.

The Court: I think I am getting more than I bargained for. I asked you to specifically state it, but I did not expect such great specificity. Do I understand that you are objecting to these questions on the ground that there is inadequate evidence upon which to predicate these specific items to which you object?

Mr. Byron: Yes, sir; I do.

The Court: Can you not summarize that last part?

Mr. Byron: Also, that they are argumentative and totally improper in these assumptions.

Mr. Cuningham: May I add, your Honor—and I hope Mr. Byron is including certain evidence that he knows all about that is in deposition form which we have agreed can go in and which is not at the moment before the Court, is not in the record.

The Court: Of course, that is true. He can assume facts which are not yet in evidence and which he knows will be introduced in evidence.

Now, there is this last paragraph on Page 2 which you were starting on. Can you not summarize that?

Mr. Byron: Well, I object to all of the positive statements made therein with respect to the so-called advantages, [843] material, profitwise, and everything else in connection with the refrigerators of the Potter type.

Mr. Ramsey: Also, on the ground that there is no evidence of commercial success of any refriger-

ator made by or under the reissue patent, nor in fact, any sale thereof.

Mr. Cuningham: Now, if your Honor please, if that completes the objection I would like to ask your Honor's permission by this witness on his direct examination before he goes into this hypothetical question to have him tell in his own words, of course, that he was the plaintiff's expert in the Stewart-Warner case; that he read the original claims on the Stewart-Warner device, and that he knows that device, and I would like to have him state the—at least some of the differences between that device which is exemplified by Stewart-Warner Exhibit *111* at *Page 2534 of the Stewart-Warner* record and the devices upon which the Admiral Corporation and the Amana, upon which he has read the reissue claims.

The purpose, sir, of that request is in support of the statements that I have made in the record at least once, and I think maybe more often, to the effect that the Admiral Corporation came much closer to the Potter patent and the Potter invention, both the reissue and the original, than did the Stewart-Warner device which was held to [844] infringe the original claims. I think that is vital, not just relevant, on the issue of the willfulness and deliberate character of the Stewart-Warner infringement. They, with full knowledge and with the aid of engineers having full knowledge from the Stewart-Warner Company and with the aid of Mr. Glen Nutley, as the testimony will show, concocted and had the temerity to use these patent claims

more than did the Stewart-Warner Company in many, many respects, and I think the record should show so, and I think the witness who is now on the stand is the best qualified witness to give that evidence.

Mr. Byron: That has no place in this case at all.

The Court: I am not going to permit it to go in, and I have already announced to you, Mr. Cuningham, that I will not permit such testimony.

Mr. Cuningham: This, your Honor, is not an effort to retry the Stewart-Warner case. It is an effort to get of record the diagrammatic showing of the Stewart-Warner Exhibit 111.

The Court: Mr. Cuningham, from the minute you got into this case you have been trying to get that Stewart-Warner case in and the fact that the jury held in your favor and sustained the validity of that fact, and you are not going to get it in here, and the minute you do you are going to get a mistrial in this case. I am telling you. [845]

Mr. Kolisch: What he has just said, this could only go to the issue of trebling damages, which is purely a Court function.

The Court: Perhaps we can do that outside the presence of the jury.

Mr. Cuningham: Very well. If your Honor please, may I make one further request. You may recall practically the last words of testimony of Mr. Parker were to the effect that he was unable to testify as to the relative or proportional insulation of the Admiral Dual-Temp refrigerator. I would like to interrupt his testimony the first thing this

morning for just one or two questions, and I give notice of my request that Mr. Ray Bommer, the chief engineer of Admiral, who is in attendance here at the trial, should take the stand and testify about it.

The Court: I told you how to ask that quqestion, and you did follow my advice. You have got it in evidence now. You do not need it at this time.

Mr. Cuningham: Well, sir, I would like to call him before Mr. Parker gets away from town. He is leaving tonight. He will be back on Monday, but he has got some business to attend to in Chicago.

Mr Byron: The other witness will be here Monday, too.

The Court: All right; that is all. [846]

(The following proceedings were had in open court in the presence of the jury:)

NORMAN S. PARKER

a witness in behalf of the plaintiff, thereupon resumed the stand and, having been previously duly sworn, was examined and testified further as follows:

Direct Examination
(Continued)

By Mr. Cheatham:

Q. Mr. Parker, assume that a valid hypothetical patent alike in all respects to the Bronaugh and Potter patent No. 2,056,165, and issued on an application filed in 1931 and reissued on December 14, 1948, as Reissue No. 23,058, which hypothetical re-

(Testimony of Norman S. Parker.)

issued patent contains the claims of Reissue Patent No. 23,058 in suit and which you have read to the jury; further assume refrigerators embodying the function and structural features of such hypothetical patent and such claims, and that such refrigerators were placed on the market in 1932 and were the first to provide in a single compact unit for household use a compartment for the preservation of fresh foods in a moist cold atmosphere above freezing temperature and a separate compartment for freezing and preserving other foods safely for long periods of time in frozen state at temperatures substantially below the [847] freezing temperature: that such refrigerators for the first time brought refrigeration of a kind claimed to the home; that such refrigerator for the first time provided a household unit wherein, without the use of covered pans, the moisture of the foods stayed in the food instead of being dried out; that such refrigerators eliminated frosting and defrosting of the chilling element in the compartment for the preservation of foods at temperatures above freezing; that such refrigerators constitute the first major improvement in refrigeration for many years; that in such refrigerators the transference of odors from one kind of food to another is minimized; that such refrigerators constituted a brand-new idea in refrigeration, not just a new model; that such refrigerators proposed such advantages that they were sold largely as replacement for conventional refrigerators; that such refrigerators afford larger possibility of profit

(Testimony of Norman S. Parker.)

per unit to the manufacturer or his distributors and that such refrigerators have a retail value ranging from $359.50 to $449.50 for Amana and $389.95 to $529.95 for Admiral, which is substantially greater than conventional refrigerators of comparable size; and assume further that the conventional refrigerators which had been produced in the United States in and prior to 1931 dried out the natural moisture of the foods stored therein because of the frosting of the chilling element within the food chamber, and that said fact had [848] existed from the beginning of electrical refrigeration during which time a substantial amount of household electric refrigerators were produced in the United States and that the largest manufacturer of household refrigeraters in the United States which maintains a staff of trained competent specialists in various branches of engineering, devoting their entire time to experimental work for the further development and improvement of the company's products, which include items in addition to household electric refrigerators presented in 1930 as its solution of the problem of food dehydration in household refrigerators a covered pan having a small cubicle content as compared with the cubicle content of the food chamber in the conventional refrigerators; and that the second largest manufacturer of household refrigerators in the United States, which also maintained a comparable staff of trained competent specialists attempted unsuccessfully at about the same time to place on the market two conventional refrigerators fastened to

(Testimony of Norman S. Parker.)

gether to minimize the same dehydration problem by operating said refrigerators simultaneously at different temperatures: assume further that a patent alike in all respects to Admiral's Patent No. 2,636,228, Exhibit 19-CC, covering a rubber gasket for a refrigerator door had since 1952 been licensed to large rubber and refrigerator companies at a royalty of 2½ per cent of the manufacturer's sales price; [849] assume that in the years 1949 to 1953, inclusive, there were sold in the United States a quantity up to 165,000 such refrigerators covered by such hypothetical patent and the claims stated above; assuming these facts to be true, have you an opinion based upon your experience as to what would be a reasonable royalty to be paid for the nonexclusive rights to manufacture and sell such refrigerators in the United States during such period?

Mr. Byron: May it please the Court, I have made my objection of record in the conference we had in Chambers just before coming into this court this morning, but I will not go into great detail on that, but I make an objection to this hypothetical question on the ground that it assumes facts not proven, it's argumentative, and entirely improper.

The Court: All right. I am going to permit the witness to answer the question.

Mr. Parker, do you have an opinion?

The Witness: Yes, your Honor, I have.

The Court: All right.

Mr. Cuningham: If your Honor please, there

(Testimony of Norman S. Parker.)

were some revisions, as you know. I would like to show Mr. Parker what revisions have been made. May I hand him my copy for that purpose?

The Court: Well, there have been no revisions, Mr. Cuningham. I permitted you to do it exactly the way you [850] did except some history which I regarded as irrelevant.

Mr. Cuningham: Well, if your Honor please, I think you didn't understand me. I didn't make myself clear. There were certain minor revisions. May I show them to your Honor?

The Court: All right. Show them to the witness.

(Whereupon Mr. Cuningham confers with the witness.)

Q. (By Mr. Cheatham): Please state your opinion, Mr. Parker.

A. On the basis of the assumption——

Mr. Cuningham: Wait. You didn't get an answer, did you?

The Witness: On the basis of the assumptions of this hypothetical question I would express my opinion that a royalty of anything less than 10 per cent would be inadequate.

Q. (By Mr. Cheatham): 10 per cent of what, Mr. Parker?

A. 10 per cent of the net sales price.

Q. The net sales price of whom?

A. Received by the manufacturer.

Q. And what, in your opinion, is a reasonable

(Testimony of Norman S. Parker.)

royalty to be paid for such a nonexclusive right to manufacture and sell?

A. I would say that 10 per cent of the net to the manufacturer is a fair royalty.

Mr. Cheatham: That is all.

The witness is yours.

The Court: All right. That completes the direct examination of Mr. Parker. [851]

Mr. Byron, are you going to interrogate Mr. Parker?

Mr. Byron: Yes, sir.

The Court: Go right ahead.

Cross-Examination

By Mr. Byron:

Q. First I wish to place a very simple question, and I am going to refer to Plaintiff's Exhibit—Defendants' Exhibit 117, which discloses or shows the cooling chamber of the accused Admiral refrigerator. We have here the cooling chamber. I am inserting the pointer within it.

The Witness: Well, your cooling liner——

Q. Well, the cooling compartment. I am speaking about the claim now. That is the cooling compartment, is it (indicating)?

A. Well, in the proper sense the compartment is the actual space which is refrigerated. Of course, that would include anything within the insulation.

Q. Let's get down to brass tacks now. If I put

(Testimony of Norman S. Parker.)

this envelope in that compartment it is in there, isn't it?

A. It certainly is in the cooling compartment.

Q. Now, it's not outside the cooling compartment? A. Correct.

Q. All right. Now, then, how do we determine the volumetric capacity or the volume of the cooling compartment? We do it, do we not, by getting the dimension from wall to wall and [852] from the rear wall to the front?

A. That's right. That defines your storage space.

Q. That's right. That is your storage space. And that storage space is the space in which you cool the food, is it not? A. That's right.

Q. And the same thing is true with respect to the freezing compartment shown in Defendants' Exhibit 117-A, correct? A. Correct.

Mr. Byron: Now, I would like to have the two enlarged charts, one showing the patent office drawings of the reissue patent in suit, and the other the enlarged drawing of one figure of the Anderson patent.

(Whereupon the exhibits were moved to the better view of the jury.)

Q. (By Mr. Byron): Mr. Parker, we have before us Plaintiff's Exhibit 16-A, showing an enlargement, the patent office drawings of the patent in suit, and Plaintiff's Exhibit 16-B, an enlargement of Figure 1 of the Anderson patent, and I

(Testimony of Norman S. Parker.)

wish to compare these two element for element with respect to certain parts or elements. Now, then, the patent in suit has a cabinet, has it not, represented primarily by the reference character 10?

A. Right.

The Court: One second. [853]

Mr. Cuningham: Objection, if your Honor please. This is outside the scope of the direct.

The Court: Objection overruled.

Q. (By Mr. Byron): Your answer was Yes?

A. Yes.

Q. The Anderson patent shows a cabinet represented generally by the reference character 9, correct? A. Right.

Q. The Potter patent shows a cooling chamber 14? A. Yes.

Q. The Anderson refrigerator shows a cooling chamber 6? A. Yes.

Q. The Potter patent shows a freezing chamber—now, you can take your choice here as plaintiff wants it.

Mr. Cuningham: Objection, your Honor.

Mr. Byron: The freezing chamber——

The Court: What is the matter?

Mr. Cuningham: I object to that "you can take your choice here as plaintiff wants it." I object to the characterization of his answer before he gives it. I ask that the question be stricken.

The Court: Are you asking about 12 or 13?

Mr. Byron: Well, that is the question. Both are freezing compartments and counsel made some ob-

(Testimony of Norman S. Parker.)

jection because when I was up here before I pointed them out to him, and he said [854] I should have pointed at one, and I pointed at one and he said I should have pointed at two.

Mr. Cuningham: Objection. Move to strike it.

Mr. Byron: Now, my question is this. I will rephrase the question.

Q. The patent in suit has a freezing compartment 12, has it?

A. That is a freezing compartment, yes.

Q. And it has a freezing compartment 13, has it? A. Yes.

Q. Now, then, the freezing compartment 12 has surrounding it a freezing coil 22, has it?

A. Yes.

Q. And then whatever reduction in temperature in the freezing compartment 13 the is is caused through the freezing coil 22, is it not?

A. Yes.

Q. Now then, referring to Anderson, Anderson has a freezing compartment 7, has it not?

A. Yes.

Q. And he has a series of coils in his pipe which receive ice trays 37, is that correct?

A. Correct.

Q. And the water in those ice trays, the water is frozen by virtue of the cooling effect of the refrigerant in the freezing coil, is that correct? [855]

A. Right.

Q. And the chamber as a whole, 7, is cooled

(Testimony of Norman S. Parker.)

through the action of the volatile refrigerant passing through the freezing coil 37. That's correct?

A. Correct.

Q. Now then, the Potter reissue patent has a machinery compartment in the bottom of the cabinet, is that right? A. Correct.

Q. And likewise, Anderson shows machinery in the bottom compartment 8? A. Right.

Q. Now, I use machinery broadly because I don't think it's necessary now to go into detail. We know that in each instance there is a motor driving a pump and the ultimate effect is to draw gas from the system and compress it and condense it so that it will be in condition to go through the cycle again? A. Correct.

Q. And that is the same in both cases?

A. Correct.

Q. Now, leading from the compressor mechanism, the liquefying unit, we will say, in the Potter patent, there is a coil 24, is that correct?

The Court: I think it might be well for Mr. Parker to go down there and stand by you.

Mr. Byron: I think it would be a good idea. I will be [856] in good company.

(Whereupon the witness leaves the stand.)

The Witness: May I have that question again?

(Last question read.)

The Witness: Correct.

Q. (By Mr. Byron): And that coil or pipe 24

(Testimony of Norman S. Parker.)

leads to the freezing coil 22 in the Potter arrangement. Is that correct?

A. Yes; through a reduction valve.

Q. I will get to that. It leads to the freezing coil?

Mr. Cuningham: Objection, your Honor. I think he should be allowed to finish his answer.

The Court: He finished it.

Q. (By Mr. Byron): Now, in the Anderson arrangement there is a pipe 32 leading from the compressor condenser set to the freezing coil 34, correct? A. Correct.

Q. Now then, the freezing coil is shown at 34 in the freezing compartment 7 in Anderson?

A. Yes.

Q. And as the freezing coil 22 in Potter is shown in the freezing compartment 12 of—or, say, combination 12-13 of the Potter patent. A. Yes.

Q. Now then, interposed in the connection between the motor compressor condenser set in the patent in suit—let me [857] rephrase that. Interposed between the motor compressor condenser set and the freezing coil 22 in Potter there is an expansion valve 23, is that right? A. Yes.

Q. And in Anderson interposed between the compressor condenser set and the freezing coil there is an expansion valve 33? A. Yes.

Q. And then in the Potter patent in suit there extends from the freezing coil 22 this same pipe or conduit or coil which passes into the coil 25, is that correct? A. That is correct.

(Testimony of Norman S. Parker.)

Q. And that is in the cooling compartment 14?

A. Yes.

Q. And likewise, in the Anderson patent the freezing coil in the freezing compartment 7 is connected to the cooling coil 41 and 40 in the cooling compartment 6 of Anderson? A. Correct.

Q. Is that correct? A. Yes.

Q. Then in the patent in suit the refrigerant—or, there is a connection from the cooling coil 25 back to the compressor set, is there not?

A. Yes. [858]

Q. And, likewise, there is a connection from the cooling coil portion 42 in Anderson back to the motor compressor set? A. Yes.

Q. Now, then, the cycling in both cases is the same, is it not; that is, from the motor compressor condenser set through the freezing coil, through the cooling coil, and back to the compressor condenser set; that is correct? A. Yes.

Q. And the same thing is true in Anderson?

A. Yes.

Q. The freezing coil 22 in Potter is in series with the cooling coil 25 in Potter; is it not?

A. Yes.

Q. By that I mean, let us say that we have two sections of hose that we are hooking up to the tappet or the faucet in our yard. We take the one section and hook it up to the faucet and then take the second section and hook it onto the first section. Those two sections, then, are in series; are they not? A. In series, in series.

(Testimony of Norman S. Parker.)

Q. In the same sense, the coils, freezing coil 22 and the cooling coil 25 in Potter, are in series?

A. That is right.

Q. Likewise, the freezing coil 34 in Anderson and the [859] cooling coil 40 in Anderson are connected in series? A. That is true.

Q. The refrigerant used in the Potter system and in the Anderson system is a volatile refrigerant, isn't it? A. That is right.

Q. And a volatile refrigerant is what?

A. A volatile refrigerant is a refrigerant which will volatize or evaporate upon proper pressure drop.

Q. For the purpose of——

A. Abstracting heat.

Q. From a freezing compartment, a cooling compartment? A. That is right.

Q. They are the same in the two cases, in the Potter case and in the Anderson case?

A. In that sense, yes.

Q. Now, then, in the Potter patent there is insulation between the machine compartment 11 and the freezing, combined freezing compartment 12-13, and between the freezing compartment and the cooling compartment 14 and around the top and the sides of the refrigerator shown in Potter; is that correct? A. That is true.

Q. And the same thing is true in the Anderson patent, is it not? A. Yes. [860]

Q. Now, then, in the Potter arrangement there

(Testimony of Norman S. Parker.)

is a thermostat 31 in the upper compartment or cooling compartment 14; that is correct?

A. That is correct.

Q. You know that there is a thermostat in the upper or cooling compartment 6 of Anderson; you know that?

A. It is mentioned in the specifications, yes.

Q. Well, that means it is there?

A. It is there.

Q. That is right. It is there just as much as it is in Potter? A. True.

Q. The function of the thermostat in Potter is to start and stop the motor for setting up the operation of the system; that is correct?

A. That is correct.

Q. And the same function, the same thermostat in Anderson does exactly the same thing, doesn't it?

A. Exactly.

Q. Now, then, the elements that we have mentioned in common here, and I go no further than that, element for element, they are all old in Anderson; that is correct, isn't it? A. That is true.

Q. Anderson is about twelve or thirteen years earlier than Potter; that is correct? [861]

A. Yes.

Q. Well, now, their being all old elements, the elements that I have mentioned all being old, then the grouping of elements—call it a combination of elements if you will—is an old combination of old elements, is it not, insofar as the parts I have mentioned?

(Testimony of Norman S. Parker.)

A. So far as you have mentioned them, yes.

Q. Now, then, what improvement Potter is supposed to have made here is an improvement in creating, or rather preventing frosting of a coil in the cooling compartment 14, for preventing dehydration of the air and food in that compartment. The improvement he made there was in that feature, in improving that coil, was it not? In other words, how does the coil in Potter differ from the coil——

Mr. Cuningham: Your Honor, objection; I think he should ask one question, not five or six.

Mr. Byron: I think there were two, but I was just trying to clarify. I will rephrase it, if you desire.

The Witness: May I have the question read?

(Pending question read.)

Mr. Byron: I will rephrase that if you desire.

The Witness: That is a double-barreled question.

Mr. Byron: I will strike that question and try to simplify it.

Q. Then the change which Potter made over Anderson to [862] prevent dehydration of food and air in the cooling compartment was in providing the coil in the cooling compartment with fins; is that correct?

A. I would say that the Potter—the Bronaugh-Potter structure included the use, and differed from Anderson in this respect of a non-frosting evapo-

(Testimony of Norman S. Parker.)

rator in the food storage compartment. I do not think it is proper to say that his improvement over the art consisted merely in making that change, since a finned coil or a coil of that type was already old at the time that Bronaugh and Potter were working.

Q. What I am trying to get at is this: Potter shows one type of coil 25. You say it is a finned coil, 25? A. Right.

Q. And Anderson shows a coil 40 which does not have fins; that is correct, is it?

A. That is correct.

Q. It is by virtue of the fact that Potter provided fins on his coils that he prevented dehydration of food in the food compartment; that is correct, isn't it? A. That is correct.

Q. And so the improvement for the preventing of the dehydration was, in Potter was to provide the coil 25 with fins?

A. That is the change he made.

Q. All right. Then if the cooling coil 40 in Anderson [863] were provided with fins, he would accomplish the same result, would he not?

A. He could have.

Q. Yes, I say he would have if he put fins on it?

A. If he did, yes.

Q. That is right. Now, you have stated that finned coils were old at that time, at the time Potter came into the field? A. They were.

Q. I know you might have in mind the Larkin patent. You may have something else in mind that

(Testimony of Norman S. Parker.)

you knew of in actual operation because of your extensive knowledge in the refrigeration field.

A. Well, I am familiar with the Larkin patent, but I have also seen other finned coils, of course.

Q. Long before, or at least before?

A. Before, shall we say.

Q. Yes, before Potter? A. That is right.

Q. For the same purpose of absorbing heat?

A. Finned coils are used to absorb heat; correct.

Q. That is right; and let us refer to this Larkin patent.

(Discussion off the record.)

Mr. Ramsey: May we ask that the Defendants' Exhibit 106, which is the Larkin patent, be admitted? [864]

Mr. Cuningham: I object to it, your Honor, entirely outside the scope of the direct.

The Court: What is that exhibit?

Mr. Ramsey: That is the Larkin patent that the witness is referring to.

Mr. Cuningham: I have no objection to its correctness or authenticity, but I think it is the wrong time to get into that prior art. That is not part of plaintiff's case.

Mr. Byron: It is part of plaintiff's case, if you please; Bronaugh talked about it, talked about buying a Larkin coil and putting it into the Potter refrigerator, and I think we ought to identify it.

Mr. Cuningham: If your Honor please, this all comes in under the alleged invalidity of the patent

(Testimony of Norman S. Parker.)

over the prior art. We have not gone into the prior art, and, as your Honor knows, that opens up eight or nine patents cited. I think we should not do that at this stage.

The Court: I think this whole line of interrogation is proper. Mr. Parker made an estimate of a reasonable royalty based upon the fact that this was a revolutionary device; that never before had these things been brought into the home, and I think that Mr. Byron has a right to interrogate him on the various elements about which he testified.

Mr. Cuningham: I bow to your Honor's ruling.

The Court: It may be admitted. [865]

(Document, Larkin Patent No. 1,776,235, previously identified as Defendants' Exhibit 106 for identification, was received in evidence.)

Mr. Byron: I think you have stated—and if I am not right, you say so—I believe you have stated that the Larkin——

The Court: Just a minute, Mr. Byron. I want to say this, that we have a rule here, Mr. Ramsey, that when one attorney is interrogating a witness he and he alone conducts the proceedings, and no one interferes. Now both Mr. Cuningham and you have violated that rule once, but I just call it to your attention because that is going to be the rule from now on; only one man on one witness on a side. Proceed.

Q. (By Mr. Byron): Mr. Parker, you have referred to the Larkin coil, and I do not know if

(Testimony of Norman S. Parker.)

you made the statement or not that the Larkin coil is the type of coil used in the Potter patent refrigerator. Is that correct?

A. Well, I have no information on that. You asked whether it was a Larkin coil or not. Of course, there are other finned coils than Larkin, but the Potter coil would have the characteristics of Larkin in that the tubing passes through a series of fins.

Q. Yes. Now, in connection with that thought that you suggested on characteristics, I would like to read from the [866] Larkin patent. That patent is No. 1,776,235, and I wish to read from Page 2 of that patent beginning in Line 113.

The Court: Mr. Parker does not have a copy.

Mr. Cuningham: Neither do we, your Honor. We came up unprepared for this part of the defendants' case.

Mr. Byron: I think I can accommodate you. (Copies of Larkin patent presented to opposing counsel and the witness.)

Q. Do you have, Mr. Parker, Page 2?

A. Page 2.

Q. Beginning Line 113. That is in the second column. A. Yes.

Q. Now, in reading this I have in mind, of course, the characteristics of the finned coil, the operation of it, the purpose of it, the function of it, and the results of it.

"With the present-type coil properly arranged in the casing a temperature of 36 degrees F. can be

(Testimony of Norman S. Parker.)

maintained in the casing without frosting the plates at all and consequently without freezing or dehydrating any of the contents of the casing whatever. A very large surface area and rapid heat absorption of the aluminum plates all lead to a rapid temperature drop when the unit is in operation. Since this temperature drop is less than two degrees, it follows that each refrigerating [867] cycle of operation must be of very short duration and consequently must greatly reduce the amount of power required to maintain it in operation. Whatever little moisture may be picked up from the air in the casing is deposited on the plates, and because of the large surface area on these plates must, when condensed, be spread on such plates in a very thin film which is constantly being removed by the circulating air and returned to the air and meats from which it was taken. Where below-freezing temperature must be maintained on the plates as in prior coolers it is obvious that any moisture taken from the meats becomes condensed and frozen on the plates and cannot be removed therefrom by the circulating air. In this case the meats not only lose weight which cannot be recovered but also deteriorate greatly in quality. This maintenance of humidity is only one of the most important results flowing from the use of cooling coils designed as disclosed herein."

That tells the entire story of the finned coils in a cooling chamber, does it not, the dehydration, non-

(Testimony of Norman S. Parker.)

dehydration, and the preservation of foods at the proper [868] temperature?

Mr. Cuningham: Objection; it tells what it tells. I think it calls for a conclusion.

The Court: This is cross-examination.

Mr. Byron: He ought to know. He is an expert.

Mr. Cuningham: Also, your Honor, to finish my objection, I object to it as not prior art in this sense. It is more than two years prior to the filing date of the patent in suit. This issued on September 16, 1930. The filing date is February, 1931. It is less than six months prior.

The Court: But it was filed June 28, 1928.

Mr. Cuningham: I know that, sir, but it is not prior art. It was not issued more than two years prior, and I object to it, move to strike it, strike the question.

The Court: The objection is overruled. The witness may answer the question.

The Witness: Well, the quotation you read from the patent discloses that Larkin had the idea when this patent——

The Court: I did not hear that last part.

The Witness: ——discloses that Larkin in this patent had the idea or taught the idea that a finned coil can be used in a refrigerated space to cool without frosting and therefore without taking moisture out of the food. He shows the structure in Figure 1 of that patent, apparently a showcase full of meat. [869]

Q. (By Mr. Byron): It would also prevent

(Testimony of Norman S. Parker.)

discoloration, at least to the extent that would be true in the Potter arrangement: is that correct?

A. Discoloration?

Q. Discoloration of meats. There has been testimony that meats discolor.

Mr. Cuningham: Objection, your Honor. I think there is no such testimony. I think it is a misquotation.

The Court: He is making that claim.

Mr. Byron: The Bommer deposition.

The Witness: I do not know anything about discoloration of meat.

Q. (By Mr. Byron): All right. Well, it will tend to improve food in better condition by virtue of the fact that the food is not dehydrated: is that right? A. Yes.

The Court: That is what Larkin claims.

Mr. Byron: Larkin tells the story here, yes; that is right.

The Court: But Mr. Parker is not a food expert. I do not think, Mr. Parker, you are vouching for it; you are just saying that is what the patent reads?

The Witness: I am saying that is what the patent says.

Q. (By Mr. Byron): And as a result of your own experience in your home—you have spoken about that in your direct [870] examination—you know that to be true, do you, as a result of your experience? A. That meat keeps better?

Q. No, that food is not dehydrated by virtue of

(Testimony of Norman S. Parker.)

the fact—for the same reason as disclosed in the Larkin patent?

A. Well, I am not fortunate enough to possess an Admiral, but I am sure that that is correct, that your food is better if not dehydrated by a freezing coil.

Q. Well, now, Admiral does not have any finned coils in the cooling chamber, does it? A. No.

Q. Then you are not talking about the Admiral: you are talking about some other——

A. No, I just said I was not lucky enough to have a non-frosting box.

Q. You were able to find a finned coil structure in Admiral? That is what I understood.

A. No, sir; I did not.

Q. Okeh, just so we understand each other.

Now, then, I would like to go to Page 5 of the Larkin patent beginning in Line 87, and Larkin says about his coil:

"Where the casings are properly installed with five-eighths-inch copper tubing spaced apart at three and a half inches between centers through [871] aluminum fins having a surface area equal to the outside surface area of the casing a temperature of 36 degrees F. can be maintained at the center of the casing by maintaining a temperature of 34 degrees F. on the face of the cooling units. Since this is above freezing point, this temperature of 36 degrees can be maintained without frosting the fins. It is obvious, too, that any moisture condensed on the fins will be removed practically as fast as

(Testimony of Norman S. Parker.)

formed by the air circulating through the units. Hence this moisture, because of the large condensing area of the fin, be formed in exceedingly thin film which can be readily absorbed by the circulating air."

That is a further statement to the same effect, a little more detailed in some respects, is that correct? A. Yes. [872]

Mr. Cuningham: May my objection be continued?

The Court: You may have your objection to this whole line of interrogation, Mr. Cuningham.

Q. (By Mr. Byron): Now, just a word or two about insulation. The lower the temperature it is desired to maintain in the refrigerating compartment the more insulation material would be used, would it not? A. Yes.

Q. Now there is another angle to that also, and in that connection I would like to refer to the Anderson patent. The larger the surface exposure of the cooling compartment the greater will be the leakage of air from the outside to the inside, is that correct? A. Leakage of air?

Q. I mean the temperature, heat.

A. Well, you're getting beyond my knowledge. You mean that if you take a unit of area of the outside the more units of area you have the more heat can pass through?

Q. That's right. A. Like——

Q. Say, for example, if this unit is one foot and the compartment was only that high (indi-

(Testimony of Norman S. Parker.)

eating), you would get a certain amount of heat leakage, and if you had two units you would get an increased amount of heat leakage, and three units, four units, five units, the heat leakage would increase that much [873] more, would it not?

A. Not heat leakage per unit, but heat leakage per total area.

Q. The greater effect would be the leakage on the inside compartment?

A. Well, you're getting beyond my information, but it sounds logical.

Q. It is the same old thing as using blankets on your bed, if you desire to keep the heat or cold from transferring through the covers you merely increase the number of blankets for insulation, do you not? A. Well, I do.

Mr. Cuningham: I thought we were going——

The Court: Well, then, you can talk for Mr.— no objection to that. It's just that not more than one can interrogate the witness. They can talk to cocounsel.

Q. (By Mr. Byron): Now, referring to the Larkin patent again, 1,776,235, I wish to call attention to the second part of that letters patent, beginning in Line 4, "This invention relates to refrigeration in general and particularly to a cooling unit adapted for use in display case refrigerators, refrigerator cars, storage rooms, household refrigerators, et cetera." So he envisioned household refrigerators as well as the other elements?

Mr. Cuningham: Objection, your Honor. [874]

(Testimony of Norman S. Parker.)

The Court: I think that's a little argumentative, too. The patent is in evidence and you may read any portion of that to the jury in your argument.

Q. (By Mr. Byron): Now, Mr. Parker, Bronaugh and Potter regarded this feature of fins as an essential feature to the successful operation of their refrigerator, did they not?

Mr. Cuningham: Objection, your Honor.

The Court: Objection will be overruled. Mr. Parker is your patent expert.

Mr. Cuningham: Your Honor, he has asked what they regarded it as. He is asking for the state of the individual's mind. He doesn't—I object to the form of the question.

The Court: Objection overruled. Go ahead.

The Witness: Can I have that question again?

Mr. Byron: Would you read the question, please?

(Last question read.)

The Witness: No, I don't think so. Fins aren't mentioned in the patent.

Mr. Byron: Well, I know that is sad for the patent. I was going to get to that.

The Court: All right.

Mr. Cuningham: I move to strike that.

The Court: Mr. Byron——

Mr. Byron: Yes, I appreciate—I beg your pardon.

The Court: All right. Let's do the arguing during the [875] argument period and the interrogation during the interrogation period.

(Testimony of Norman S. Parker.)

Mr. Byron: I know Mr. Parker so well that I sort of forget I am not in his office. I am forgetting where I am, and I beg your pardon.

Q. Now, in the Potter refrigerator, then, as distinguished from the patent in the commercial refrigerator which he made, he used finned coils for accomplishing the result he was looking for; that is, preventing frosting of the coil and preventing dehydration of the food. That's correct, isn't it?

A. Correct.

Q. Now then, getting to the point which you mentioned, Bronaugh and Potter nowhere in their patent specification mentioned the word "finned," do they? A. They do not.

Q. And that being true, then that specification does not give a full, clear, concise, and in exact terms in describing this so-called finned coil which you claim is shown at 25 and Figure 2 of the Potter patent?

The Court: Don't answer that.

Mr. Cuningham: I object, your Honor. It's an ultimate question for the jury.

The Court: Yes. I think I have explained to the jury that Mr. Parker is a different kind of a witness than we have had so far. He can answer the ultimate question. You don't [876] have to believe him but he can give his opinion, because he is a patent expert. You may answer the question, Mr. Parker.

The Witness: Can I have it again?

(Testimony of Norman S. Parker.)

Mr. Byron: Would you read the question, please?

(Last question read.)

The Witness: Well, the specification calls for a structure——

Mr. Byron: Now, wait a minute. I asked a very specific question about fins.

Mr. Cuningham: May the witness answer, your Honor?

The Court: No, wait a minute. I think he has to answer the question.

You will have to read the question this time loudly enough so I can hear it.

(Last question read.)

The Witness: It does not describe a finned coil. It shows one in the drawing.

Q. (By Mr. Byron): Now, wait a minute. I limit that question to the specification, the description in the specification. I am entitled to an answer on that.

The Court: Yes.

The Witness: It does not describe a finned coil in the specification.

Mr. Byron: For any purpose whatsoever.

A. Yes.

Q. For any purpose whatsoever? [877]

A. Correct.

Q. Then as a patent expert, Mr. Parker, you knew that the specification of the patent in suit does not meet the requirements of the statute, is

(Testimony of Norman S. Parker.)

that correct? A. No.

Q. It does not meet it?

A. No, that is not correct. It does, yes, in my opinion.

Q. Now, are you saying that the description of the finned coil—you say there is no mention of the finned coil in the specification?

A. That's correct.

Q. Well, then, there can be no full, clear, concise description of the finned coil or—in exact terms?

A. That's correct. There is no description of the finned coil.

The Court: Well, I think that what Mr. Cuningham is getting on his feet to object for is to the argument between——

Mr. Cuningham: That's correct, your Honor.

The Court: ——between you——

Mr. Cuningham: And I object.

The Court: ——between you and Mr. Parker, and I think it would be perfectly all right to ask him questions, but try to avoid argument.

Mr. Byron: Well, I think Mr. Parker understands what I mean there sufficiently so that he might give an answer. [878]

The Court: It's five minutes of eleven now, Mr. Byron, and I think this is a propitious time to take a recess for about ten minutes.

Mr. Byron: Thank you.

The Court: Ten-minute recess.

(Recess.)

(Testimony of Norman S. Parker.)

The Court: Go ahead, Mr. Byron.

Q. (By Mr. Byron): Mr. Parker, is there such a thing as a nonfrosting coil and a frosting coil?

A. You mean in the sense that the coil is inherently frosting or nonfrosting?

Q. Well, in any sense you desire to answer that.

A. No. I think you would have to use those terms in relation to the situation of the coil in a particular assemblage of parts.

Q. I think that's right. You can cause a coil to frost or you can treat the coil so it will not frost, is that correct? A. That's correct.

Q. And as long as we are on that subject, it's a little bit out of my line here for the moment, but let's take the function of the expansion valve 23 in Potter and the expansion valve 33 in Anderson, or either one. The function of that expansion valve is to control the flow of liquid refrigerant from the high pressure side to the low pressure side, is that correct? A. That's true. [879]

Q. And when that liquid refrigerant passes through the valve into the freezing coil at the entrance the liquid refrigerant evaporates, and in so doing absorbs heat from the freezing compartment. That's correct, isn't it? A. Right.

Q. Then that liquid refrigerant, if it has not all been used up in the freezing coil, passes on to the cooling coil in the cooling compartment, is that correct? A. Bronaugh and Potter?

Q. In both.

(Testimony of Norman S. Parker.)

A. Bronaugh and Potter say so. I would assume it's correct.

Q. Well, now, when that liquid refrigerant passes from the freezing coil into the cooling coil in the cooling compartment of Bronaugh and Potter patent in suit, I believe there is some frost formed at the entrance?

A. At the entrance, so the patent says, there may be slight frost formation where the coil enters the compartment.

Q. Yes. Now then, we have showed that with a given setting of the expansion valve. Now, let us open the valve a little wider. Then we get an increased flow of liquid refrigerant, do we not?

A. You would.

Q. And under those circumstances it's quite possible that the liquid refrigerant would go further in the cooling coil, is that correct? [880]

A. I would think so.

Q. And the further that goes in the cooling coil before evaporating, the greater the tendency will be toward frosting? A. I would think so.

Q. And you could supply enough liquid refrigerant by opening the expansion valve far enough to have a liquid refrigerant passing substantially through the cooling coil in the cooling compartment, could you not?

A. Well, I have never had any experimental experience with it, but I would think that was the case.

(Testimony of Norman S. Parker.)

Q. And in such a case you would get a frosting on the coil, would you not?

A. I think you could.

Q. Think you could, yes. So that the frosting or nonfrosting of a coil is a function controlled by the expansion valve, is that correct?

A. Well, by the expansion valve plus the general capacity of the system. I don't know that that would be the sole factor.

Q. Well, assuming a constant capacity.

A. I would think so. I haven't made any tests, of course.

Q. That same thing would be true in the Anderson arrangement also, wouldn't it?

A. Well, I am not sure. Could you ask me—I want to make sure that I understand the [881] question.

Q. All I have in mind is this: In Anderson if you increase the opening of the expansion valve 33 to the extent that you get liquid refrigerant passing through the liquid coil, and then passing through a substantial part of the coil 40, you would get an increased frosting? A. I would think so, yes.

Q. Same as you would in Potter, correct?

A. Yes.

Q. Well now, let us go from that extreme back to another extreme. Let us close the expansion valve 23 in Potter, 33 in Anderson, so that you get a relatively small amount of liquid refrigerant in the cooling coil. What would be the result?

(Testimony of Norman S. Parker.)

A. Well, that's—are you talking about both those structures?

Q. Yes; both of them. You can take either one.

A. Let me have the question read.

Mr. Byron: I will reframe the question.

Q. Looking at Plaintiff's Exhibit 16-A of the drawings of the patent in suit, assume that the expansion valve 23 is opened an amount whereby a certain amount of liquid refrigerant passes up into the cooling coil 25. Now, under those circumstances, if we close the expansion valve 23 somewhat, what will be the result?

A. You would have less refrigerant going for evaporation to the coil 25; therefore, less abstraction of heat. [882]

Q. And if the valve—expansion valve 23 were opened only to the extent that all of the liquid refrigerant were transformed to a vapor in the freezing coil 22, would there be any effect in the cooling coil 25 for abstracting heat from the cooling chamber 14?

A. Well, it certainly would if all of the refrigerant is evaporated in the coil 22 so that no liquid passes to the coil 25. Then there could not be any abstraction of heat by actual evaporation. How much heat abstracts may be from the mere circulation of the refrigerant, I wouldn't know.

Q. Well, if the refrigerant were all transformed into a vapor in the refrigerating coil 22, and you had nothing but the vapor passing through the

(Testimony of Norman S. Parker.)

cooling coil 25, would you get any cooling effect in the cooling chamber?

A. I frankly don't know because I don't know what the temperature of the vapor would be.

Q. Under those circumstances would you get any frosting of the coil in the Potter arrangement?

A. No—of the upper coil?

Q. Yes. A. No, you certainly would not.

Q. And would you get any in the cooling coil 40 of the Anderson patent?

A. If no refrigerant entered the Anderson upper coil to evaporate, I do not see how you could get any frosting on it. [883]

Q. No liquid refrigerant?

A. I mean no liquid refrigerant.

Q. That's right. So they would be the same in that respect? A. Yes.

Q. You nodded your head. Did you answer?

The Court: Yes, he has answered.

Mr. Byron: I see.

The Witness: I thought I answered.

Q. (By Mr. Byron): I assume, of course, you have considered the file history of the Potter-Bronaugh patent?

A. Yes, I have gone through it.

Q. And what is the exhibit number?

Mr. Ramsey: Defendants' Exhibit 101.

Q. (By Mr. Byron): Defendants' Exhibit 101 is the file wrapper of the original Bronaugh and Potter patent 2,056,165, and Defendants' Exhibit 102 is the file wrapper of the Reissue Patent 23,058.

(Testimony of Norman S. Parker.)

The Court: Get the two file wrappers out, the original, and the reissue.

Mr. Byron: And I offer those in evidence at this time.

Mr. Cuningham: No objection, your Honor.

The Court: I think they are in, aren't they?

Mr. Byron: I think they are. They were before, but I want to make sure of them here.

The Court: The original and reissue, both of them, give them to Mr. Parker, will you? [884]

Mr. Cuningham: Your Honor, it seems appropriate at this time to ask what the purpose is of these exhibits, the file wrappers. May we have a statement from our adversary as to the purpose?

The Court: The reissue patent is the crux of this lawsuit. If you did not have that in evidence, you could not maintain your lawsuit.

Mr. Cuningham: Your Honor, I think I did not make myself clear. I would like to know the purpose of offering this bulky patent on both patents, the original and the reissue. Why does the defendant wish to have it in?

The Court: Do you want to tell him why you want it in?

Mr. Byron: Yes; to cross-examine Mr. Parker to get at what the alleged invention is here, what Bronaugh and Potter attempted to get and what they thought was their invention. I do not want to make an argument here before the jury.

The Court: Go ahead.

Q. (By Mr. Byron): Will you please refer to

(Testimony of Norman S. Parker.)

the page in that file history, Defendants' Exhibit 101.

The Court: You mean all the claims that were canceled?

Mr. Byron: I want to refer to a few of those claims.

The Court: Very well.

Q. (By Mr. Byron): Do you have that place, Mr. Parker? [885] A. Yes, I have.

Q. I wish to read to you Claim 1, the original Claim 1 which was submitted by Bronaugh and Potter in their patent application to indicate, to show what they regarded at that time as their invention. Now this is Claim 1. I think I would like to do a little pointing. I am starting over again now, Claim 1:

"A refrigerator having a freezing compartment (indicating on drawing) and a cooling compartment thermally separated from said freezing compartment."

Now, that refers just to a refrigerator having a freezing compartment and a cooling compartment thermally separated; is that correct?

A. Correct.

Mr. Cunningham: Your Honor, I object to the form of the question as to what they thought was their invention. I will admit the claim.

Mr. Byron: That forces me to say that when Bronaugh and Potter, like any other applicant or applicants, file a patent application in the patent office they take an oath that they are defining their

(Testimony of Norman S. Parker.)

invention in these claims, what they regard to be new and patentable. If that is not what they meant as their invention, then they were taking a false oath, and I do not believe they were. [886]

The Court: I think what Mr. Cuningham is objecting to is the fact that all of these claims which you propose to read on Page 3 were rejected by the examiner as not being any invention.

Mr. Byron: That is right.

The Court: Is that right?

Mr. Cuningham: That is correct, sir; that objection was acquiesced in.

Mr. Byron: I was rather anxious that the jury should know just exactly what was rejected, and the acquiescence—what is your invention.

Mr. Cuningham: Well, if your Honor please, it is all in the case in the best form possible. Why ask Mr. Parker about it? He cannot improve on the record.

The Court: Of course, Mr. Parker is an expert, and he can do what other people cannot do, and that is he can explain a patent. If the file history is important in connection with some of the claims that have been granted, then the examination is proper. I want to know then from Mr. Byron, do you contend that the rejected claims limit the claims that were allowed?

Mr. Byron: What it does is to show what these patentees admitted was not their invention, and then we get into broader claims which were rejected and canceled, and now they are putting an interpre-

(Testimony of Norman S. Parker.)

tation on the new claims in this case [887] giving an interpretation of the same scope of some of the canceled claims, and there is file wrapper estoppel.

The Court: Have you pleaded file wrapper estoppel?

Mr. Ramsey: Yes.

Mr. Cuningham: I fail to see how Mr. Parker can do anything about that. The claims are in. They are all cleared.

Mr. Byron: He is contending infringement here. That goes into the scope.

The Court: Do you have another subject matter to go into now besides the file wrapper, and then we can look at the questions in the whole situation during the noon recess. Do you have anything to carry you through on Mr. Parker until noon?

Mr. Byron: Yes, but there is a sequence here that I would like to kind of follow. I will see what I can do.

The Court: How long will this take you to go through the file wrapper?

Mr. Byron: Oh, I suppose what I am going to say, probably a half-hour.

The Court: On the file wrapper alone?

Mr. Byron: Well, the file wrapper and related matters. I can go on.

The Court: Go ahead.

Mr. Byron: I will tell you: I will promise to cut it [888] short. I will do that.

The Court: When?

Mr. Byron: Right now.

(Testimony of Norman S. Parker.)

Q. Before I get further into the file wrapper, I might ask you a few questions somewhat related.

Do you regard—or Potter regards the expansion valve 23 as an essential element in the operation of his refrigerator, doesn't he?

A. That is an equivalent, something to drop the pressure.

Q. Well, let us just stick to his structure now, the one shown here in suit. He regards that expansion valve 23 as an essential element in the operation of his device? A. Yes, sir.

Mr. Cuningham: I object to that "regards," your Honor.

Q. (By Mr. Byron): Well, it is an essential element, then, is it?

The Witness: Some means for getting the pressure drop at that point is essential.

Q. And the thermostat 31 in Potter's arrangement is an essential element, is it not?

A. He so regarded it.

Q. On that connection, I wish to call your attention to Page 2 of the Potter reissue patent in suit, beginning in Line 72. I wish to read the paragraph, about 15 lines.

"While the thermostat 31 (indicating on [889] drawing) controls the temperature in compartment 14 (indicating on drawing) the setting of the expansion valve 23 (indicating on drawing) controls the temperature of the compartments 12 and 13. As the expansion valve is adjusted to restrict the discharge of refrigerant, the pressure differential in

(Testimony of Norman S. Parker.)

the refrigerant circuit is increased, lowering the temperature of the coil 22 and that of compartments 12 and 13, until they reach their respective minima corresponding to the valve setting. The refrigerant will be completely vaporized in coil 22 until the temperatures of the compartments near said minima, when some of the refrigerant will reach the coil 25 in liquid form, and, by vaporizing therein, will cool compartment 14. Thus, by our system the compartments 12 and 13 must first be cooled to minima fixed by the setting of the expansion valve before compartment 14 can be cooled to a minimum set by the thermostat. This arrangement whereby one temperature is controlled by a thermostat and another by an expansion valve is a novel feature of our invention."

Now, I think you have stated before, but let us make certain about it, the thermostat in the cooling compartment 6 of Anderson will control the temperature of that [890] cooling compartment 6 in Anderson, will it not? A. Correct.

Q. And the expansion valve 33 of Anderson will control the temperature in the freezing chamber 7; that is correct, isn't it?

A. I believe that is correct.

Q. Well, then, that is not a novel feature, is it?

A. No.

Q. To Bronaugh and Potter?

A. I would not think so.

Q. I would like to go to this file wrapper again, Defendants' Exhibit——

(Testimony of Norman S. Parker.)

The Court: Go ahead, Mr. Byron. I have thought it over, and I have come to the conclusion that it is proper cross-examination. I am not going to limit you, and, Mr. Cuningham, you may have an exception to this whole line of interrogation.

Mr. Cuningham: Thank you, your Honor.

Q. (By Mr. Byron): Your attention is invited to Page 13 of the file wrapper, and that paper is an action by the Patent Office which rejects all of the original claims on the Davenport patent, 1,731,711; is that correct? A. Yes.

The Court: Are you going to show the Davenport patent?

Mr. Byron: Yes. [891]

(Discussion off the record.)

Q. (By Mr. Byron): You might turn to the drawing, or if you like to see the drawing, Mr. Parker, the drawing here?

The Witness: Is it 1,731,711?

Mr. Byron: That is right.

A. I have it right in front of me.

Q. Davenport shows a freezing compartment C, does he not? A. Yes.

Q. And he shows a cooling compartment B, does he not?

A. Yes, he calls it a food chamber.

Q. Well, it is a cooling compartment, isn't it?

A. I think so.

Q. That cooling compartment has an evaporator 5, has it not? A. Yes.

(Testimony of Norman S. Parker.)

Q. That evaporator is in the form of a hollow wall, is it not, 5? In other words, two spaced sheets of metal between which a liquid refrigerant passes?

A. Yes. You will excuse me if I check with the patent as I answer your questions.

Q. Oh, certainly. Take your time. It is perfectly proper.

There is an evaporator 4 for the freezer, is there not? A. Yes.

Q. The evaporator 4 and the evaporator 5, he says the [892] evaporator 4 in the freezing compartment and the evaporator 5 in the cooling compartment are connected in series. A. Yes.

Q. And the evaporated liquid which is then vapor passes from the cooling compartment of the evaporator over to the condenser compressor set does it not? A. Yes.

Q. Then we have the condenser shown at 11: right? A. Yes.

Q. Where the vapor is changed into liquid refrigerant again so that it can pass through the regular cycle? A. That is correct.

Q. Your attention is called to Page 15 of the file wrapper of the original patent, Defendant's Exhibit 101, in which Potter and Bronaugh make these remarks. We will go back to Page 14 to make a connected story. Now bear in mind that this Davenport patent has been cited in the application of the original Potter application, and the claims rejected on the patent. In an argument among other things Potter and Bronaugh say, "In the

(Testimony of Norman S. Parker.)

first place, they have provided three kinds of compartments—" That is to say, Potter and Bronaugh have.

"In the first place, they have provided three kinds of compartments, No. 14 (indicating on drawing) which is a cooling compartment and [893] not a freezing compartment, No. 13 which is a freezing compartment in which are placed nonvolatile foodstuffs, and the last, a water-freezing compartment 12 in which only as much frost can form as results from water evaporation. In the compartment 13, which is separated therefrom, the temperature is so low that the frost is in the form of a white powder, and it is impossible for this ever again to go to the water-freezing compartment." [894]

Q. (By Mr. Byron): Now, this point, continuing the quotes:

"In the compartment 14 there is condensation but practically no frost and if it does form it is caught in the collector 28 and transferred to the receptacle 30 after which it is never again frozen."

Mr. Cuningham: I object, your Honor. This is exactly what I was afraid of. I was afraid we would go into these endless arguments of the attorneys, and this is not part of our case, it's not within the scope of the direct, and I think, furthermore, it's incompetent to prove anything in the case under—in the defendants' case, and I object to it and move to strike it.

Mr. Byron: Among other things, your Honor, it shows that Potter and Bronaugh recognized the

(Testimony of Norman S. Parker.)

fact that there was frost in their chamber, and I want to talk a little bit about that and about this condensation and dripping.

The Court: Well, I think it all is applicable and relevant in connection with plaintiff's case. I thought it was being introduced for a little different purpose, but I can see that the purpose for which it is being used is perfectly proper, and the objection is overruled. You don't have to object any more, Mr. Cuningham, because I will give you an objection to this whole line.

Mr. Cuningham: Thank you, your Honor. [895]

Q. (By Mr. Byron): Now, referring to the Potter arrangement, why is it necessary to have this drain 28 and this bottle for collecting water in the patent in suit?

A. The drain is to catch moisture which may drop from the fins and to put it in the container which can be removed.

Q. And all of that moisture which goes in the form of water eventually into that bottle 30 comes out of the air in the cooling compartment, and it comes out of the food in the cooling compartment, does it not?

A. One or the other or both.

Q. Right. Now, in that same connection I will refer to the Anderson patent which is in evidence, and your attention is directed to page 2. Do you have a copy?

A. I will see if it's in this book. Yes.

Q. Beginning line 35, and referring to the An-

(Testimony of Norman S. Parker.)

derson patent, Plaintiff's Exhibit 16-B, now, page 2 of the Anderson, beginning on line 35 there is:

"A removing guard or screen netting (indicating) extends in front of the back member of the coil 40 (indicating) as at 46 and inside of the side members of the coil as at 45 (indicating) to prevent any food vessel from being placed where dripping from the coil would fall into such vessel."

Now, that shows that there is dripping also from the coils on the Anderson arrangement, is that correct? [896] A. Correct.

Q. And that would be the same, then, both in the Anderson and in the Potter and Bronaugh patent in suit?

A. That I don't believe I would be able to answer.

Q. Insofar as the collecting of water and the dripping of water is concerned.

A. In both of them at some stage there is formation of—or, rather, there is moisture on the coils which drips. That's all I can get from that.

Q. And that comes from the air in the cooling compartment and from the food in the cooling compartment? A. Correct.

Q. Now, then, your attention is directed to page 25 of the file wrapper in Defendants' Exhibit 101 thereby an amendment—or Claims 15, 16, and 17, which were added to the original specification. That is correct, is it not? A. Yes.

Q. I would like to read just one of those claims. 15:

(Testimony of Norman S. Parker.)

"A refrigerator comprising a cabinet formed with a dry cold storage chamber and a relatively moist and warm cooling chamber thermally insulated from the cold storage chamber, a freezing coil in the cold storage chamber, a nonfrosting coil in the cooling chamber (indicating), a line directly connecting said coil (indicating) and a heat pumping [897] unit (indicating) for drawing gassified refrigerant from the nonfrosting coil (indicating) and returning the same as a liquid into the freezing coil (indicating)."

If you will observe these Claims 15, 16, and 17, which are added to the application on December 2, 1932—that is the date of the application, isn't it, or the amendment? A. Right.

Q. That is the first time that any claims have been inserted on this nonfrosting idea. That's correct, is it not?

A. I think so, without reading it.

Q. Now, that Claim 15 does refer to a nonfrosting coil and you and I have agreed that there is no such thing as a nonfrosting coil per se?

A. There is no such thing as a coil which under all circumstances will be nonfrosting.

Q. It depends on how it's used?

A. On how it's used and in what environment it's used.

Q. Now, Claims 15 and 16 were later cancelled, were they not?

A. I believe so. They are so marked on my copy.

Q. Now, for the moment I want to return to the

(Testimony of Norman S. Parker.)

Larkin patent and what I have read rather extensively to you from the Larkin patent about the finned coils and how they prevent dehydration of the food and deterioration of the food.

Now, here is an element of each of the claims in [898] suit and I want to ask you whether or not Larkin doesn't disclose that element.

Mr. Cuningham: Objection, your Honor. You can't anticipate element by element a combination claim.

The Court: Objection overruled. This is cross-examination.

Q. (By Mr. Byron): I am referring to that element which reads as follows:

"A cooling refrigerant coil or expander having heat-conducting surfaces within the cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from the said compartment to maintain the air in said cooling compartment at a substantially stable temperature above 32 degrees F."

Now, that element describes the Larkin arrangement, does it not? A. I believe it does.

Q. In the exhibits here in court of the Potter refrigerators—could I have this out of the way?

(Whereupon the exhibits we. moved.)

I refer first to the Plaintiff's Exhibit 11-A. There is a shield in the rear upper part of the cooling compartment, is there not?

(Testimony of Norman S. Parker.)

A. Yes. [899]

Q. And that shield covers the finned coil. Right?

A. Yes.

Q. And that shield covers the finned coils in such a way so completely that you cannot tell if the coils or the fins frost or not, correct?

A. Not without taking the shield off.

Q. Well, the shield, when it's in place, you cannot tell? A. That's correct.

Q. And that shield is fastened in there permanently, is it not? A. I don't know.

Q. Well, come and find out.

Mr. Cuningham: Well, I object, your Honor.

Mr. Byron: Well, this means something.

The Court: Yes, I know.

The Witness: There are four screws on it.

Q. (By Mr. Byron): Rather permanently fixed?

A. Well, you could take it off if you wanted to. I would suspect it's not meant to be taken out in ordinary use.

Q. Well, could you or anybody else opening that door tell whether or not the cooling coil in that cooling compartment is frosted?

A. No, I don't think so; not by merely looking.

Q. Well, it would take quite an inspection?

A. No, sir; you can put your fingers around the end of the [900] shield and feel whether it's frosted or not.

Q. And who would do that?

Mr. Cuningham: I would object.

(Testimony of Norman S. Parker.)

Q. (By Mr. Byron): Well, I would like to know.

The Witness: I did it once.

Q. Well, when you are making an inspection for it. A. In an operating machine, yes.

The Court: I think you have got enough in here to make your argument.

Mr. Byron: Well, I am going to another phase of the examination, your Honor, and shall I start now or——

The Court: Well, no, I think that we are going to quit now and we will start at—I was going to recess until 2:00 o'clock, but in view of the fact we are letting them out five minutes early we will start 15 minutes early at 1:45.

(Whereupon the jury was excused for the noon recess.)

The Court: Are you going into the file wrapper any more?

Mr. Byron: Well, if I do it will be very briefly. Very briefly.

The Court: I wanted to tell you this, that I stopped you when you were on page 8 of the original claim after you read Claim No. 1, but on reconsideration I came to the conclusion that you could with propriety interrogate the witness on the other claims, original claims, and I don't want to [901] limit you except that I hope you won't read all the 14 original claims. But you can take up two or three of them.

(Testimony of Norman S. Parker.)

Mr. Byron: I intended to read three, your Honor, but I will let it go at one.

The Court: You can read all 14 if you want, but I hope you won't.

Mr. Byron: All right.

The Court: Recess till 1:45.

(Thereupon, at 12:00 o'clock m., a recess was taken until 1:45 o'clock p.m.) [902]

Afternoon Session

(At 1:45 o'clock p.m. the trial herein was resumed, pursuant to recess, and proceedings herein were had as follows:)

NORMAN S. PARKER

a witness called in behalf of Plaintiff, thereupon resumed the stand and was further examined and testified as follows:

Cross-Examination
(Continued)

By Mr. Byron:

Q. Mr. Parker, in connection with your application of the claims of the patent in suit to the accused structure, the Admiral refrigerator, I wish to call attention first to an element that Claim 2—I think it is in all of the claims but illustrative anyhow in 2, that element which is a cooling refrigerant expander having heat-conducting surfaces within

(Testimony of Norman S. Parker.)

said cooling compartment. First, let us understand what is meant by expander. Is that the same as coil in this case?

A. Expander is any member in which a refrigerant, and to me the term includes the duct itself and whatever conducting surface it has which carry heat to the duct.

Q. Yes, and it is called variously a coil in this case, is it not, and an evaporating tube or an evaporator tube or an [903] evaporator?

A. That is right.

Q. Well, now, will you point out again in any drawing or in the accused devices, in the models, a cooling refrigerant expander having heat-conducting surfaces within said cooling compartment.

(Discussion off the record.)

The Witness: May I have that question read?

(Pending question read.)

The Witness: The duct portion of the cooling refrigerant expander I am pointing to—I believe it is the coil 102 on the transfer plate 104, and it is in close heat-conducting relation with the sleeve which is in the cooling compartment, the sleeve itself plus the what Mr. Morton described as the fins 70 and, I believe, 104, deliver the heat from the cooling compartment to the coil itself.

In other words, the coil has the heat-conductive surface which lines the storage space and from

(Testimony of Norman S. Parker.)

which the heat is abstracted by the refrigerant evaporated in the coil portion 102.

(Discussion off the record.)

Q. (By Mr. Byron): Referring to the Potter patent in suit, the cooling refrigerant expander having heat-conducting surfaces within the cooling compartment, and now I am referring to Plaintiff's Exhibit 16-A, that cooling refrigerant [904] expander is shown at 25, is it not?

A. Correct.

Q. And it is within the cooling chamber 14, is it not? A. It is.

Q. And its heat-conducting surfaces are within chamber 14, are they not?

A. That is correct.

Q. Correct? A. That is correct.

Q. Now, then, referring to the accused device, and you have said that a portion of the freezing coil which is attached to the primary transfer plate is a part of the cooling coil; is that correct?

A. I don't think I said it that way.

Q. Well, any way you like it; you say it again.

A. The so-called primary expander, if I remember the terms of Mr. Morton correctly in his patent, he said, was divided into two parts; one which is secured about the exterior of the sleeve of the freezing compartment, and the other of which was secured in heat-transfer relation with the primary transfer plate.

Q. In any event, that is one continuous coil for

(Testimony of Norman S. Parks.)

a freezing coil to be used in connection with the freezing compartment, is it not?

A. No, I would not say that. The part of a continuous [905] line of ducting or tubing, part of it abstracts heat from the freezing compartment, and part of it, that part in the transfer plate 104, abstracts heat from the cooling compartment, and that is why it is there.

Q. All of the freezing refrigerant, however, passes through the freezing coil attached to the primary transfer plate; is that not correct?

A. That is true.

Q. Now, then, that coil, the freezing coil, that portion of the freezing coil is not within the cooling compartment, is it—I say that portion of it.

A. Well, in the first place, I hesitate to call that a freezing coil because it is not in connection with the freezing compartment. It is within the insulation which surrounds the liner shown in Exhibit——

Q. Let's get it out here.

(A refrigerator box was brought before the jury.)

The Witness: The primary transfer plate which is secured below the freezing locker, the coil on the primary plate which takes heat from the moist cold compartment is on the exterior of the primary plate, and therefore it is on the exterior of the food storage container of the cooling compartment. It is, however, within the insulation which surrounds the

(Testimony of Norman S. Parker.)

compartment and is subjected to the same [906] conditions of temperature. Whether you say that the compartment begins inside of the locker or not, or this locker, rather, it is hard for me to see—to me everything that is within the refrigerated space surrounded by the insulation about the cooling compartment is within the cooling compartment.

Q. That is the very first question I asked you this morning, Mr. Parker, to get a definition. I thought I had.

Referring to Defendants' Exhibit 117, I am now placing my hand in this shell. That is the cooling compartment, is it not?

A. That is within the cooling compartment.

Q. That is the cooling compartment, is it not?

A. No.

Q. Where do you put vegetables, fruit and food generally to cool them?

A. Why, surely, it is part of the cooling compartment where you store vegetables, but that is not the only part of the cooling compartment. The cooling compartment includes everything within the insulation surrounding this sleeve.

Q. That is your position?

A. That is my position.

Q. But you do not put any food in the insulation for cooling purposes, do you?

A. You certainly do not. That is what this sleeve is for. [907]

Q. That is right. Now, then, freezing liquid refrigerant passes through this primary coil which

(Testimony of Norman S. Parker.)

goes to the freezing compartment, the outside of the freezing compartment: that is correct, isn't it?

A. Yes, that is correct.

Q. Now, then, that whole part of the coil, freezing coil, receives freezing refrigerant, does it not?

A. Well, it receives evaporating refrigerant.

Q. Well, in accordance with the terms that we are using in the patent of freezing refrigerant passing through a refrigerant coil, it all passes through that coil? A. Yes, it does.

Q. That is your freezing refrigerant.

A. The refrigerant which comes up and about the freezing locker passes through that freezing coil.

Q. That is right, and that freezing coil takes a refrigerant which passes through the coil at about zero degrees Fahrenheit, doesn't it?

A. I couldn't tell you that.

Q. Well, it is for freezing purposes, isn't it?

A. I would so assume that it does.

Q. Well, you know that, don't you? If you are going to freeze food in the upper chamber, you have got to have a freezing refrigerant to do it?

A. Yes, I would say so. [908]

Q. Now, then, let us assume for a minute that your definition of the location of the freezing coil is correct—and I do not take that definition but just for the moment—the heat-conducting surfaces now—this would be a cooling coil, a portion of it, you say—you say it is a portion of the cooling coil?

(Testimony of Norman S. Parker.)

A. I do not remember precisely how I said it, but I think you are getting into an environment which would give information somewhat different than I want to give.

Q. I do not want you to give that, Mr. Parker.

A. What I said, I said that this part of the coil was a coil which took heat out of the moist cold compartment, and it took it through a heat-transfer surface in the moist cold compartment.

Q. That means just one thing to me, and that is that this is a refrigerating coil, a freezing coil in the primary circuit, then, is a part of the cooling circuit for the cooling compartment; is it not?

A. It is not connected in circuit with this so-called secondary system, but it is a part of the system which takes heat out of the moist cold compartment.

Q. Then it is a coil—that portion is a coil, a freezing coil for, acting as a cooling coil to take heat out of the main food compartment; is that correct?

A. That would be one way of saying it. That would not be [909] the way I would say it.

Q. You say it the way you want it.

A. I would say that this part of the primary coil which is not freezing anything adjacent at this point is not intended to freeze, is the means for abstracting heat from the moist cold compartment.

Q. Now we have got to start over again. You have agreed heretofore, I believe, that a freezing

(Testimony of Norman S. Parker.)

refrigerant passes through this portion of the freezing coil to go on and freeze material in the freezing compartment. Now you have agreed to that, have you not?

A. No, I have not agreed to that. What I have agreed to is that volatile refrigerant flows through this coil, can flow through this coil, and since it is connected in series will also flow through the coil which freezes material in the frozen food locker.

Q. Then that freezing refrigerant in that coil, the coil section is at least zero degrees, isn't it?

A. Well, I would be guessing on that, but I assume it is.

Q. It is far below 32 degrees?

A. Certainly.

Q. If you want to freeze, all right.

A. The refrigerant itself as it passes through that coil?

Q. Yes, is about zero degrees Fahrenheit?

A. I would expect so. [910]

Q. All right. Now, then, let us get back to this claim, a cooling refrigerant expander having heat-conducting surfaces within the cooling compartment, but disregard that phase of it for the moment—constructed and arranged to maintain its heat-conducting surfaces, that is the tube itself, the expander?

A. I do not accept that. The heat-conducting surfaces out of the expander are the surface of the liner, Exhibit 117. [911]

(Testimony of Norman S. Parker.)

Q. (By Mr. Byron): Well, now, let's see. Here is what the claim says——

A. Those are surfaces which abstract heat from the moist cold compartment.

Q. Well, that's quite an argument. Now, let me ask you a question. I am referring to the element of the claim here, "A cooling refrigerant expanded."

A. All right.

Q. Would you point it out here? "Having heat-conducting surfaces." Now, it has heat-conducting surfaces. It has them elsewhere, but it has them here? A. Yes.

Q. All right. That's as far as I want to go. "Heat-conducting surfaces within said cooling compartment." Of course, they're not there, but let's forget that. And now, referring to the cooling refrigerant expander constructed and arranged to maintain its heat-conducting surfaces, that means the cooling refrigerant expander having its heat-conducting surfaces at a temperature above 32 degrees Fahrenheit. Now, you have agreed that the refrigerant passing through that coil is around zero degrees. That being true, how could the surfaces of this coil be above 32 degrees?

A. I don't find the language that you have been reading in that claim calling for the surfaces of the coil or duct itself being at 32 degrees. What it calls for are heat exchange [912] surfaces.

Q. That calls for that element "a cooling refrigerant expander," and you have agreed that that may be an evaporator or a coil. Now, a cooling

(Testimony of Norman S. Parker.)

refrigerant expander having heat-conducting surfaces within the cooling compartment and now the cooling refrigerant expander and constructed and arranged—is constructed and arranged to maintain its heat-conducting surfaces—these are heat-conducting surfaces, or a part of them—at a temperature above 32 degrees Fahrenheit. Now, I say, that in view of the fact that the volatile refrigerant passes through there as zero degrees Fahrenheit, this coil and the surfaces thereof will be below and far below 32 degrees Fahrenheit, correct?

A. No, I don't understand it. Well, perhaps I can clarify my position by saying that I think you are asking me all these questions on the assumption that the expander is limited to a section of pipe. To me the expander, term "expander" in those claims means that pipe plus whatever heat exchange surfaces are attached or connected to it.

Q. Well, I will take that definition for the moment, just as long as you say, as you have now, that this coil (indicating) associated with the primary transfer plate is a part of the cooling refrigerant expander. You have said that now?

A. You mean the coil on the primary plate?

Q. Well, the coil here through which the refrigerant is [913] passing for freezing in the upper chamber and cooling in the lower chamber.

A. Of course, you have two sets—two paths. What I am talking about is the coil which is actually primarily secured to the primary transfer plate.

Q. Is there a condition in the operation of this

(Testimony of Norman S. Parker.)

accused device when the freezing refrigerant passes through the coil attached to the primary plate and also passes through the coils around the freezing compartment? A. Surely.

Q. O.K. Then under those conditions at that time the freezing refrigerant passing through that freezing coil is about zero degrees Fahrenheit, is it not? A. It is, yes.

Q. Now, then, it is said, and you agreed, that that portion of the freezing coil attached to the primary transfer plate is a part of the cooling system for the cooling compartment.

A. That's correct.

Q. All right. Now, I am talking about that part. This is what the claim says: "A cooling refrigerant expander constructed and arranged to maintain its heat-conducting surfaces," and it has heat-conducting surfaces there (indicating)? A. Yes.

Q. "To maintain it at a temperature above 32 degrees Fahrenheit." Now, that's an impossibility, is it not? [914]

A. That particular part of the expander does not have those characteristics.

Q. Thank you. Now, let us get back on the first part of that element of the claim, and I am referring back to this—and you can add to it as much as you want—"A cooling refrigerant expander having heat-conducting surfaces within (indicating) the cooling compartment." I would like to have you point that out.

(Testimony of Norman S. Parker.)

A. This freezer has surfaces and they are within the compartment.

Q. How is that possible?

A. Well, you could have two ways. In the first place, the heat from the interior of this compartment flows to and along these surfaces (indicating). They are in the compartment just as much as the face of these walls are in this room. So look at it another way: The space which is refrigerated within the structure is the space within the insulation and this liner here (indicating) is within the insulated area, and it is part, in my opinion, of the compartment.

Q. Well, I call it cooling compartment. A cooling compartment. And that is the compartment in which the food is placed for cooling purposes. That's correct, isn't it?

A. Well, that certainly——

The Court: Well, the man has disagreed with you.

Mr. Byron: What is that? [915]

The Court: Mr. Parker has a different definition.

Mr. Byron: I see.

The Court: And I think you have reached an impasse, and I think that point calls for expert testimony on your part. I don't see any useful purpose being served by continuing with him having one definition of a cooling compartment and you having a different one.

(Testimony of Norman S. Parker.)

Mr. Byron: Yes. Well, I would like to go just one step further, your Honor.

Q. I would like to have you trace out the connection between that portion of the freezing coil which you call a cooling coil and connect that to the cooling compartment some way or other.

A. What I call the cooling coil on the primary plate is put into heat-abstracting relationship with the locker—with the moist cold locker and a closely present primary transfer plate against the secondary transfer plate even with this perma gum between them to improve the heat transfer, and as Mr. Morton says in his patent, these plates can be described as fins and the second—the inner fin here in close heat transfer relation with the primay plate is further connected to the surface within the compartment.

Q. Well, now, wait a minute. We are going a little fast here.

Mr. Cuningham: Your Honor, I think he should be allowed [916] to finish his anwer. He obviously hadn't finished.

The Court: Well, I was lost about a half hour ago. I haven't come back yet.

Mr. Byron: Well, if I interrupt you, Mr. Parker, you know I am sorry and I apologize. I always intend to be polite to you.

The Witness: I wasn't conscious of being interruped. I am perfectly willing to have——

Mr. Byron: Thank you.

Q. Well, now, we have got the connection be-

(Testimony of Norman S. Parker.)

tween the primary transfer plate and what is known as the secondary transfer plate, you say, for extracting heat from the cooling compartment on the inside. Now, will you follow that heat-abstracting connection from this secondary plate?

A. That is the purpose of the system of secondary tubing which is a closed system with some refrigerant in it, which I believe I described on my direct examination and which has coils on the face of the front—front face of the secondary heat transfer plate on this exhibit, Defendants' Exhibit 17, which——

Q. 117? A. 117.

Q. All right. Now, you have got the coil of the secondary system connected to the secondary transfer plate. Now, will you follow through, telling us where these cooling coils go [917] then?

A. The cooling coils include a structure in which there is a down pipe to the bottom of the back of this sleeve, and there is a little well, you might say, in the bottom of that where liquid refrigerant from the secondary system can gather. Then——

Q. I would suggest now, if you don't mind, that you might refer to your Exhibit S-A-1. It may be helpful to you.

The Witness: We have a little trap or bend here marked, which I marked 74, and this down pipe will deliver refrigerant to it under conditions when the liquid in the refrigerant of this—rather, when the refrigerant of this secondary circuit is in liquid form. Then the liquid can become vaporized

(Testimony of Norman S. Parker.)

and rise in these pipes to where it enters the coil which is in the heat transfer relation with the secondary plate, and it can then be cooled by the passage of refrigerant through the coil 102 on the primary plate and as it becomes cool it may become liquefied and flow down. So you have a closed circuit there with a certain amount of refrigerant in it, and a body of refrigerant, however, which is in that circuit and never travels out of it. There is no liquid or fluid connection between the secondary circuit and the primary circuit.

Q. There is what?

A. No fluid connection. There is only a heat transfer connection between the two plates or, what Mr. Morton called, [918] fins in his patent.

Q. Now, this is the accused device, and it has what is known as a secondary system. That's correct? A. That's right.

Q. And that is what you have just described?

A. That's what I have described.

Q. And in other words, there are two separate and distinct circuits, one known as the primary circuit in which the freezing refrigerant passes from the liquefying unit up through and around the freezing compartment for freezing that compartment—— A. (Witness nods head.)

Q. ——and then there is the secondary system in which we have the closed circuit pipe around the back and sides of the cooling compartment. That's correct, isn't it?

(Testimony of Norman S. Parker.)

A. That's correct. All it does is deliver heat to the transfer plate.

Q. Now, I would like to use the blackboard for a minute.

(Whereupon the blackboard was put into position for use of counsel.)

Q. (By Mr. Byron): To put that in a simplified diagram in the patent suit we have this element which we will call the liquefying unit, the pump, and the compressor. Then we have a connection up to the freezing compartment. That is a freezing coil? [919] A. (Witness nods head.)

Q. And then that is connected in series to a cooling coil and then that refrigerant—liquid refrigerant is changed to a vaporized heat, and that vapor returned to the original source, the motor compressor. That's correct?

A. I am not sure that that——

Q. This is the patent in suit.

A. Oh. The patent in suit?

Q. Yes. A. Yes. Correct.

Q. Now, this is the—— A. That's Potter.

Q. Potter, yes. Is that the freezing coil (indicating)?

A. And that is the cooling coil.

Q. This is the cooling coil? A. Right.

Q. And this is the cooling compartment up here, and this is the freezing compartment here (indicating)? A. Correct.

Q. Now, then, let's go to the accused device. We start off with the same motor compressor outfit, call

(Testimony of Norman S. Parker.)

if liquefying unit, and then we have a primary coil, a freezing coil, which comes up around the freezing compartment over the freezing compartment and under it for freezing material within. That's correct, isn't it? A. Right. [920]

Q. And then this coil returns to the liquefying unit again? A. So far right.

Q. Yes. Now then, we have in addition a secondary circuit, and this is the secondary circuit which is—I think I can do a better job on that.

The Court: Give him the eraser.

Mr. Byron: This is all right. Thank you.

Q. We have a coil in this form. This is the secondary coil, isn't it, for cooling purposes?

A. That's right.

Q. Now, this coil is entirely separate from this coil?

A. So far as any passage of liquid is concerned, it is.

Q. That's right. The liquid in the primary coil stays in the primary coil and circulates around it?

A. That's right.

Q. And the refrigerant in the secondary coil stays in it—— A. (Witness nods head.)

Q. ——in the secondary coil, it never gets out?

A. That's right.

Q. So that in the accused structure we may use two entirely different refrigerants?

A. Yes, you could.

Q. That's right. Well, now, structurally those are different, are they not? A. Quite. [221]

(Testimony of Norman S. Parker.)

Q. I think that's all I want on that.

The Court: Mr. Parker, I think you can take your seat if you want to.

Q. (By Mr. Byron): And they function differently don't they? That is the actual operation of it is different? A. In detail, yes.

Q. Yes. Now, this may be a slight resume, but the accused structure is what is known as a cold wall refrigerator, is it not?

A. I think that's a fair statement.

Q. And in the Potter patent there is a finned coil arrangement? A. That's correct.

Q. And they are structurally different, are they not?

A. Yes; in detail. They perform the same function, but they are structurally different.

Q. They are structurally different, are they not?

A. Right.

Q. Now, as a matter of fact, they function differently too, don't they? A. In what sense?

Q. Well, I am asking you.

Mr. Cuningham: I object, your Honor. He is——

Mr. Byron: Well, I am asking the questions; the witness answers questions.

Mr. Cuningham: He is asking you to clarify your question [922] "In what sense."

Mr. Byron: He understands.

Mr. Cuningham: I think he does not.

The Court: Objection overruled. This man is an expert. This is cross-examination.

(Testimony of Norman S. Parker.)

The Witness: Can I have that question again?

Q. (By Mr. Byron): The finned coil mechanism in the cooling compartment of the patent in suit or in the structure of the patent in suit functions specifically differently from the cold wall refrigerator in which it is cooled by a different means. That's correct, it functions differently?

A. Well, if you are talking in terms of function, they perform the same function which is to provide an extended heat transfer surface through which heat is abstracted from the storage space. In that sense they function the same.

Q. Their functional action, then, we will say, is different, then, is it not?

A. You mean the mechanics are different?

Q. All right, the mechanics. So they function differently mechanically?

A. Well, that's one of these questions that is a little bit hard to answer Yes or No. To me they do not function differently, but they have mechanical differences. In other words, in both of them there is an extended heat transfer surface which abstracts heat from the interior of a compartment, and in that sense they function precisely the same. Mechanically, [923] they are different in that obviously 60 or 30 fins on edge with a pipe through them don't look like and are not mechanically the same as a cold wall in which there is piping outside of the extended surface of the cold wall. [924]

Q. And, specifically, they do not act alike, do they?

(Testimony of Norman S. Parker.)

A. I would say they act alike as far as abstracting heat is concerned.

Q. I know, act alike specifically in extracting heat from the cooling compartment?

A. I would say that they acted alike in that respect.

The Court: Are you trying to find out that the end result is the same but they act differently in order to reach that result?

Mr. Byron: Yes.

The Court: Ask him the question. Is that true?

Mr. Byron: All right; you have the question.

The Witness: I would say the end result is the same, but the nature, mechanical nature of the surface presented to the air in the cooling compartment is different mechanically than the extended surface of Potter.

Q. (By Mr. Byron): Now, your attention again is called to the Davenport patent, 1,731,711, which is in evidence, I believe. Is it?

(Discussion off the record.)

Mr. Byron: I will offer it in evidence now.

Mr. Cuningham: No objection, your Honor.

The Court: I thought that the Davenport was admitted?

Mr. Byron: I think so. Perhaps not.

The Court: Davenport is admitted now. That is the [925] one with the 711, ending with the figures 711?

Mr. Kolisch: This is 109 for Identification.

(Testimony of Norman S. Parker.)

The Witness: 1,731,711.

(Thereupon, the document, Davenport Patent 1,731,711, heretofore identified as Defendants' Exhibit 109 for Identification, was received in evidence.)

Mr. Byron: '711 is the one we are talking about.

The Court: Mr. Parker has that in his hands now. Do you have a copy, Mr. Cuningham, of the Davenport?

Mr. Cuningham: No, your Honor, we did not come prepared for this.

The Court: Give him a copy of Davenport, 109. Was Davenport cited by the defendants in their answer?

Mr. Byron: Yes, your Honor.

The Court: Well, then, you should have come prepared.

Mr. Cuningham: Of course, your Honor, my remarks apply to this. This is, you will notice, October 15, 1929, the same as with the finned patent.

The Court: While we are waiting for Mr. Byron to find the patent, I would like to ask a question that has not been made clear to me. Mr. Byron read a portion of Claim No. 2, but from time to time he would interject his own remarks about the wording, and so I did not get it clear, but this is the portion, I believe, you read: [926]

"A cooling refrigerant expander having heat-conducting surfaces within said cooling compart-

(Testimony of Norman S. Parker.)

ment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment."

Do I understand that the disagreement between you and Mr. Byron is that you call the compartment not only the space within the walls but also the space outside the walls but within the box, the outer box; is that right, Mr. Parker?

The Witness: I would say within the insulation.

The Court: Within the insulation?

The Witness: Yes, same temperature conditions.

The Court: Therefore, when they refer to surfaces within said cooling compartment you claim that it does not make any difference whether the coils are inside of the compartment or outside of the compartment?

The Witness: Yes, your Honor, that is my position.

The Court: You also made a statement that I did not understand in answer to a question by Mr. Byron dealing with, I believe, this statement:

"A cooling refrigerant expander having heat-controlled surfaces and arranged to maintain its heat-conducting surfaces at a temperature above 32 Fahrenheit." [927]

You said that that was impossible in the accused structure. Now, is that correct?

The Witness: I do not remember that, your Honor. I do not remember how that was.

The Court: You said something about impossi-

(Testimony of Norman S. Parker.)

bility. I was wondering whether you were referring to the fact that the description in Claim No. 2 was impossible of realization or whether under the make-up and the structure of the accused machine it was impossible for that to happen.

The Witness: I don't remember that language, your Honor. I am not clear on that as to what was said.

Mr. Byron: I remember it precisely.

The Court: Well, will you tell us then.

Mr. Byron: The point was that the section of the freezing coil which they choose to say also is a part of the cooling coil system, the cooling chamber, has a refrigerant passing therethrough which, when the machine is in operation, is at least zero degrees Fahrenheit. It is in a freezing condition. Now, the inside of that coil, being a part of the cooling coil as they explain it, cannot be maintained above 32 degrees if the refrigerant passing therethrough is zero degrees. It just cannot be. Now, that is the point.

The Witness: And as to that, the surface of that, I would agree that is a proper statement. In other words, the surface of the tubing at the rear of the primary transfer [928] plate is certainly at a temperature 32 degrees Fahrenheit, so we are in agreement on that.

The Court: Well, what does that mean, Mr. Parker?

The Witness: That just means that at a point outside of the moist cold locker or moist cold stor-

(Testimony of Norman S. Parker.)

age container there is a part of the tubing through which the refrigerant or coils, the moist cold container, flows which is at a temperature below 32 degrees Fahrenheit; but if I correctly understand the statements in the service manuals of the Admiral Company, it is only under unexpected and undesired conditions that the surface within the sleeve within which the food is put ever reaches a temperature below 32 degrees Fahrenheit, and that is the surface, of course, which is in contact with the food.

The Court: Are you talking about the accused structure when you said it was impossible, or are you talking about the description in Claim No. 2?

The Witness: Well, I am talking about the structure as shown in the exhibit, the physical exhibit before us at which Mister——

Mr. Byron: That is Defendants' Exhibit 117-A.

The Court: As I understand it, the purpose of this examination is to show that the accused structure does not do something which the claims require.

Mr. Byron: Does not do something; does not have [929] something; both.

The Court: All right; go ahead.

Mr. Byron: I have got a point again, only I thought of something else just a minute here, thought that your Honor asked about.

(Discussion off the record.)

(Testimony of Norman S. Parker.)

Mr. Byron: Has that been clarified in your mind, your Honor?

The Court: Yes. I thought if it is clarified in my mind there is a chance of its being clarified in the minds of the jury if they understood the Court.

Mr. Byron: I am prompted to go ahead and talk about it some more, but I do not know that I shall.

The Court: Do it with your own witnesses.

Q. (By Mr. Byron): Well, we were just talking before we entered into this general discussion about the cold-wall type of refrigerator such as exemplified by the accused refrigerators and then the finned-coil type as exemplified by the patent in suit, and you stated that, structurally, they were different. Functionaliy, you did not, were not quite sure.

A. Oh, yes; I was quite sure.

Q. Well, I mean they act differentiy with these structures. It is a compound proposition. Now, they are two separate types, distinguished, aren't they? A. Yes. [930]

Q. It was in that connection that I was about to call your attention to the file history of the original patent and first to Page 13, and the only reason I am calling attention to that page is that the original 14 claims in this Bronaugh-Potter patent were rejected on the Davenport patent, 1,731,711. That is one that we have discussed briefly, and I brought out that it had a freezing compartment and a cooling compartment, and in the freezing compartment

(Testimony of Norman S. Parker.)

there was a freezing coil, and in the cooling compartment there was a cooling coil, you could call it, or cooling expander, connected in series, and that expander takes the form of a wall of the cooling compartment and takes the form of two spaced metal plates between which the refrigerant passes. That is a cold-wall refrigerator, isn't it, the Davenport, 1,731,711? A. Yes, it is.

Q. With that understanding, your attention is directed to Page 30 of the file wrapper, and this is what Mr. Potter and Mr. Bronaugh have to say with respect to that Davenport patent:

"As for the Davenport patent, the evaporator 5—" That is this plate which forms a part of the cooling wall, cooling compartment, and this is what Bronaugh and Potter say with respect to the Davenport patent in question. [931]

The Court: On the patent of Potter, second to the last line.

Mr. Byron: That is right.

"As for the Davenport patent, the evaporator 5 is not a coil, and it is impossible with Davenport's construction to obtain the results which applicants obtain with their non-frosting coil in the cooling chamber."

You see those remarks?

The Witness: Yes, they are there.

Q. (By Mr. Byron): There are two more Davenport patents shown on this Defendants' Exhibit 114-L. One is a Davenport Patent 1,769,118, and the other is 1,726,344, and in the 1,726,344 there are

(Testimony of Norman S. Parker.)

a series of loops or a coil behind the cold plate of the refrigerator and behind the cover plate of the cooling compartment which constitutes a cold-plate structure; does it not? A. Yes.

Q. And the cooling coils in that patent, 1,726,344, behind the shell or liner of the cooling compartment are arranged substantially the same as the coils around the cooling compartment in the accused structure; right?

A. It has a different form but similar relationship.

Q. Well, they are cooling coils?

A. That is correct, cooling coils outside of the liner. [932]

Q. Yes, and they are both cold-wall structures?

A. That is right.

Mr. Byron: I would like to offer in evidence the three Davenport patents; first, the 1,731,711 is in, as I understand it. Then Davenport Patent, 1,769,118 is Defendants' Exhibit 108.

The Court: 108.

Mr. Byron: Yes; and Davenport——

The Court: Wait a minute. Any objection?

Mr. Cuningham: Yes, your Honor; the same objection you will notice as to the dates, July 1, 1930, and August 27, 1929.

Mr. Byron: The filing date, your Honor, the filing date of the Davenport patent, 1,769,118, is April 28, 1927.

The Court: Objection overruled. The patent may be admitted. 108 is admitted.

(Testimony of Norman S. Parker.)

(Document, Davenport Patent No. 1,769,118, previously identified as Defendants' Exhibit 108 for Identification, was received in evidence.)

Mr. Byron: And the Davenport Patent 1,726,344.

Mr. Kolisch: That is Defendants' Exhibit 107.

The Court: What is the filing date?

Mr. Byron: For that the filing date is April 29, 1926.

The Court: Any objection? [933]

Mr. Cuningham: Oh, yes, your Honor. I assume that when you say they are admitted they are admitted for this limited purpose covered by one of our requested instructions?

The Court: This particular exhibit was not introduced on any restricted basis, but what is the purpose of the offer, Mr. Byron?

Mr. Byron: It is to show that the accused devices are following the prior art and not the Potter patent. We are following something earlier. We have two different types of refrigerators, a cold-wall type which these three Davenport patents show and as the accused structure shows as distinguished from the patent in suit which shows the finned-coil type.

The Court: They may be admitted. What is the number of that, 107 and 108?

(Davenport Patents 1,726,344 and 1,731,711, previously identified as Defendants' Exhibits

(Testimony of Norman S. Parker.)

107 and 109, respectively, were received in evidence.)

Q. (By Mr. Byron): Your attention is directed to the file wrapper and the contents of the Thomas I. Potter Patent 2,219,789.

Mr. Cuningham: Now, if your Honor please, I object to that for any purpose. It has nothing to do with the patent in suit. It has nothing whatsoever—years later. It has [934] nothing to do with the plaintiff. There is not a statement in it that could be binding upon the plaintiff. It has absolutely no relevancy to any issue in this case.

The Court: I have never heard of the patent.

Mr. Byron: I will prove to the contrary of that, your Honor.

The Court: Is this a later patent?

Mr. Byron: It is a later Potter patent, but it shows after premature thought and far and before this litigation was ever contemplated he made certain statements with respect to the cold-wall type and the finned-coil type——

The Court: Objection overruled. It may be admitted for the same—on the same grounds that I admitted the other patent.

Mr. Cuningham: I note an exception to that, your Honor. This has no connection with the plaintiff.

The Court: That is what they said when you offered your patent.

(Testimony of Norman S. Parker.)

Mr. Cuningham: On the contrary, the patent is that of the chief engineer of the defendant.

The Court: And this is the patent of Mr. Potter himself. Objection overruled.

Mr. Byron: 118, we offer it in evidence.

(Document, Potter Patent 2,219,789, previously identified as Defendants' [935] Exhibit 118 for Identification, was received in evidence.)

Mr. Cuningham: This is the whole file wrapper or the patent?

Mr. Byron: The whole file wrapper.

The Court: Wait a minute, Mr. Byron, I think that the patent is probably admissible even on this time as a basis for interrogating Mr. Parker, but it seems to me that we would save a lot of time if you would put those files in on your case in chief. I think you will go a lot faster. [936]

Mr. Byron: That's right, your Honor. But if I may have three minutes on this I will conclude, because it's very pertinent.

The Court: Are you offering the file wrapper for admissions made by Mr. Potter?

Mr. Byron: Yes. To show what he stated about the cold wall type of refrigerator.

The Court: I am not going to admit it. You can have it identified at this time and then we will discuss the admissibility at a later time.

Mr. Byron: All right. But I can talk about it under those circumstances? It's marked for identification as Defendants' Exhibit 118. Now——

(Testimony of Norman S. Parker.)

The Court: I thought tha' you wanted it iden-tified for the purpose of propounding a question.

Mr. Byron: That's right, I do.

The Court: Go ahead.

Mr. Byron: And to refute his conclusion as to infringement.

The Court: Go ahead.

Q. (By Mr. Byron): Now, your attention, Mr. Parker, is invited to page 25 of this file wrapper and particularly to the rejection of claims on the Gibson patent 2,073,741.

Mr. Cuningham: Now, if your Honor please, I think we ought to have the Gibson patent in the case. [937]

Mr. Byron: We will get it. We will offer it right now. Glad to have it in.

The Court: All right. Do you both join in offering the Gibson patent?

Mr. Cuningham: No, your Honor. I think it's not prior art. I think we have disposed of it but I——

Mr. Byron: I am not saying I am using it as prior art. That is the Gibson patent 2,073,741, and I will offer it in evidence as——

The Court: I will take that one under advisement.

Mr. Cuningham: No objection.

The Court: Well, then, the ruling is different. It may be admitted.

The Clerk: 119-A.

Mr. Byron: Now, then, is that the——

(Testimony of Norman S. Parker.)

Mr. Cuningham: Which of the two Gibson reissues or the original are you putting in?

Mr. Byron: This is the original and we have put in the reissue patent which is set up in the answer.

Mr. Cuningham: As the file wrapper?

Mr. Byron: No. The file wrapper is of the Potter patent. I don't know the number. It's 118 for identification.

The Witness: It's 221——

Mr. Cuningham: You are not offering the file wrapper of the Gibson patent?

Mr. Byron: I haven't yet. [938]

Mr. Cuningham: You have it marked on your list of exhibits.

Mr. Byron: I am not saying we are going to offer it.

Mr. Ramsey: 119-A, 119-B, and 119-C.

Mr. Cuningham: Those I read are not the file wrappers, not the patent themselves. You have——

Mr. Byron: We offer the file wrappers, and I will offer the copies of the patents also.

Mr. Cuningham: That's unnecessary, your Honor. We have got it in twice. The question is whether you put the whole file in or what he didn't mark.

The Court: All right.

Mr. Cuningham: It isn't any proof of anything as far as what was filed originally. The patent is what issued and not what was filed.

The Court: Mr. Byron——

Mr. Byron: Yes, sir.

(Testimony of Norman S. Parker.)

The Court: ——you offered Gibson. What is the exhibit number of Gibson?

Mr. Cuningham: 119-A, 119-B, 119-C.

The Court: Is that one patent, or are there more than one patent?

Mr. Cuningham: It is one patent and two re-issues, and there is no objection to the file wrapper going in.

The Court: And the file wrappers include a copy of the [939] patent that was issued?

Mr. Cuningham: Of all three patents that were issued for this one invention.

The Court: Are you offering that?

Mr. Byron: Yes.

The Court: All right. They are admitted, all three file wrappers.

(The documents were thereupon admitted in evidence as follows: File Wrapper, Reissue 20,073,741, Gibson, as Defendants' Exhibit 119-A; File Wrapper, Reissue 21,040, Gibson, as Defendants' Exhibit 119-B; and File Wrapper, Reissue 21941, Gibson, as Defendants' Exhibit 119-C.)

Q. (By Mr. Byron): Now, Mr. Parker, there has been quite a span since I started, so I will ask you to refer to the file wrapper of the later Potter patent No. 118 for identification, and I will call your attention to one page there where certain claims of the Potter patent were rejected on various

(Testimony of Norman S. Parker.)

references including the Gibson patent 2,073,741. Right?

A. Claims 1 to 6 and 8 are rejected as reading directly on Gibson, and Gibson is given above as 2,073,741. Claim 7 is rejected on Gibson also.

Q. Well, that's sufficient. Now, then——

The Court: Wait a minute, Mr. Byron. I thought that [940] this was done for the purpose of impeaching Mr. Potter.

Mr. Byron: It is, and just one more question and it will.

The Court: All right. But you have to show some acquiescence or something and a ruling by the examiner rejecting a claim is not an admission on the part of Mr. Potter.

Mr. Byron: And your Honor, it's to impeach this witness to a certain extent on the question of results that are obtained in the accused cooling compartment.

The Court: How are you impeaching Mr. Potter by the ruling of an examiner?

Mr. Cuningham: Mr. Parker?

The Court: Mr. Parker.

Mr. Byron: Well, I am just showing that he says that you get the same results in the cooling compartment of the Potter refrigerator and in the cooling compartment of the accused refrigerator, and I want to show that Mr. Potter in presenting a case before the patent office entirely disagreed.

The Court: Mr. Potter?

Mr. Byron: Yes.

(Testimony of Norman S. Parker.)

Mr. Cuningham: Your Honor, what could that have to do possibly with Mr. Parker? What can it have to do with the case?

Mr. Byron: I will ask whether or not Mr. Parker then [941] agrees or disagrees with Mr. Potter.

Mr. Cuningham: Furthermore, your Honor, this wasn't even notice under the statute. We have no notice of this patent.

The Court: Have you—did you notice this one in your pleadings?

Mr. Cuningham: No, sir.

The Court: Did you show them?

Mr. Cuningham: The answer is No, sir, nowhere. And it's not in compliance with the 30-day statute.

Mr. Byron: I understand we have an order on that.

The Court: An order?

Mr. Cuningham: That's news to me. I don't know about any order.

Mr. Ramsey: If the Court please, there was notice more than 30 days and I actually presented a motion and I understand the order was signed and included Gibson and Lundgard.

Mr. Cuningham: That is not what we are talking about. I am talking about this Potter——

The Court: Thomas I. Potter. The new Potter?

Mr. Byron: We can take it subject to notice and they can do as they please about it.

The Court: We are going to take a recess now. Take a recess for ten minutes.

(Testimony of Norman S. Parker.)

(Whereupon the jury was excused for a ten-minute [942] recess.)

The Court: First I want to say that I do not regard a statement by an examiner rejecting a claim as being an admission against Mr. Potter.

Mr. Cuningham: Yes.

The Court: If Mr. Potter acquiesces in a statement or makes an admission which appears in a file wrapper the file wrapper is admissible for that limited purpose.

Mr. Byron: That's all I want.

Mr. Cuningham: If your Honor please, Mr. Potter is not on trial. This patent has nothing to do——

The Court: You don't wait until I finish, Mr. Cuningham.

Mr. Cuningham: I am sorry, I apologize.

The Court: Under our rule and the rule I announced previously with the exception of the provisions inserted by Mr. Cuningham in the pretrial order, unless an exhibit is noted prior to the time of the trial, it may not be used for any purpose whatsoever, with the possible exception that if a party is caught by surprise. Now, I don't think that the defendants here are being caught by surprise by anything that Mr. Parker has said, and therefore, I don't see that this document is admissible on either of those two grounds.

Mr. Byron: Your Honor, I am caught by surprise, very much so, to have Mr. Parker's interpretation of the claim as applied to the accused struc-

(Testimony of Norman S. Parker.)

ture. That is so far remote [943] from my thinking that I didn't think it was possible. And in that sense I am taken by surprise.

And Mr. Parker has said certain things about the structure and operation, the functioning, and particularly the results in the accused device, what happens in the cold food compartment of the accused device, and I want to show that there are authorities such as Potter who do not agree with Mr. Parker.

Mr. Ramsey: May I add something to that?

The Court: Well, I'm not going to make Mr. Potter into an expert. He is an expert salesman but I don't think he is an expert engineer, and I am not going to permit his learning—engineering learning—to be used as a basis for impeaching Mr. Parker.

Mr. Ramsey: If the Court please, may I note that this is in the pretrial order? This particular document was 118 of the pretrial order.

Mr. Cuningham: We objected to it in the pretrial order.

Mr. Ramsey: It's not a question of surprise.

Mr. Cuningham: Wait a minute, if your Honor please. It is under Section 282, Chapter 28. The 30-day notice was not given with respect to this patent. Of course, it has no relevancy whatsoever. I don't know why I object to it except that it just encumbers the record and it may be prejudicial, it seems to me, if they try to use it in a fashion—but I [944] think they can show——

(Testimony of Norman S. Parker.)

The Court: Well, I want to say that this satisfies the local court rules in all respects if it was listed as an exhibit. I was under the impression, from what you said, Mr. Cuningham, that it was not listed as an exhibit.

Mr. Cuningham: Well, if your Honor please, and I quote, "In actions involving the validity or infringement of a patent the party asserting invalidity or known infringement shall give notice in the pleadings or otherwise in writing to the adverse party at least 30 days before the trial."

The Court: Oh, Mr. Cuningham, the purpose of that section is altogether different from the purpose for which this patent is being offered. This patent is not being offered to show anticipation or some other thing in accordance with the purpose of the section which you are reading.

This exhibit is being offered solely for the purpose of getting some admissions from Mr. Potter or to in some way impeach Mr. Parker.

Now, I don't know how it's impeaching Mr. Parker. Now, we are coming to the second basis. Tell me again, Mr. Byron, what do you say that this exhibit shows?

Mr. Byron: Well, this exhibit, your Honor, shows that certain claims—and I don't care about that particularly—were rejected in a Potter application on the Gibson patent. The Gibson patent showed pretty well what the accused structure [945] is.

(Testimony of Norman S. Parker.)

The Court: Why wouldn't this be better to come in on your case in chief?

Mr. Byron: Well——

The Court: What is the purpose of interrogating Mr. Parker with reference to it? It just takes a lot longer to put in your case through adverse witnesses.

Mr. Byron: I know. But Mr. Parker has taken the position that you get the same results in the cooling compartment of the accused device as you get in the cooling compartment of the Potter patent, and this——

The Court: Suppose some——

Mr. Byron: ——and this statement is to the contrary.

The Court: Suppose some examiner in the patent office says that Mr. Parker is mistaken? So what?

Mr. Byron: I don't worry about the examiner in the patent office. I am talking about what the attorneys for Potter said in trying to get the claims allowed and denouncing the accused structure; that is, the cold wall type, and saying that they are inferior and cannot operate and get the results that the patent in suit gets.

The Court: Now, the only basis for the statement is that Potter and Potter's then attorneys were more expert than Mr. Parker.

Mr. Byron: Well, I wouldn't like to say that because [946] Mr. Parker is quite an expert.

The Court: Really, I have been trying to give very wide latitude for cross-examination and even

(Testimony of Norman S. Parker.)

for original examination, but I don't think that this is admissible, Mr. Byron.

Mr. Byron: That is on cross-examination.

The Court: On cross-examination, because I don't think it—it might have been proper when you were interrogating Mr. Potter himself to show that Mr. Potter didn't know very much, but I just can't see the relevancy in interrogating Mr. Parker.

Now, it couldn't be filed after estoppel because this is the wrong file wrapper. Well, I am going to sustain the objection and we will consider it on the defendants' case in chief.

Recess for about five minutes.

(Recess)

(The following proceedings were had in open court within the presence of the jury:)

The Court: Go ahead, Mr. Byron.

Q. (By Mr. Byron): On a quick resume with respect to one phase of this case in the patent suit there is only one refrigerant, right?

A. That's right. [947]

Q. That sole refrigerant first passes through the freezing coil 22 and then through the cooling coil 25? A. Yes.

Q. The two coils, 22 and 25, are connected in series? A. Correct.

Q. In the accused there are two separate and distinct refrigerants? A. That's right.

Q. One refrigerant for the freezing coil and a second and separate refrigerant for the cooling coil?

(Testimony of Norman S. Parker.)

A. I wouldn't state it that way.

Q. There is a second refrigerant in connection with the cooling of the cooling compartment?

A. That's correct.

Q. And in the accused one refrigerant for the freezing coil passes through the motor compressor set, through the freezing coil for the freezing locker and back to the motor compressor set?

A. That's correct.

Q. In the accused the second and separate refrigerant passes through a coil of a secondary transfer plate down through a single central stem and outwardly and upwardly through two lateral branches and back to the coil of the secondary transfer plate?

A. That's correct. [948]

Q. In the accused there is a primary refrigerant circulating system and secondary refrigerant circulating system? A. That's correct.

Q. The primary is for freezing purposes for the freezing locker or freezing compartment——

A. It has that function.

Q. ——the secondary is for cooling purposes for the main food compartment?

A. I would say that was incomplete because the secondary circuit supplies or delivers heat from the cooling compartment to the primary circuit to be removed by the primary circuit.

Q. Well, the secondary circuit is for cooling the cooling compartment and the food therein?

A. That's correct.

Q. Now, I want to discuss with you this element

(Testimony of Norman S. Parker.)

in the claim "A single liquefying unit associated with said expander and constructed and arranged to condense refrigerant expanded by heat extracted from both compartments." Now, the first part of that, "A single liquefying unit," in the patent in suit, the single liquefying unit comprises the motor 16, the compressor 15, and condenser 18 in the compartment 11. That's correct, isn't it?

A. I can't see the drawing. Would you repeat that, or I can come up there. [949]

Q. Did you get the question?

A. I didn't, no.

Q. All right. I will repeat it. In the patent in suit the single liquefying unit comprises the motor 16, the compressor 15, condenser 18 set in this compartment 11. A. Right.

Q. In the accused refrigerator there is a liquefying unit in the circuit of the primary or freezing coil or expander. That's correct? A. Yes.

Q. That is shown at the bottom of Plaintiff's Exhibit 8-A-1? A. Right.

Q. In the accused refrigerator the refrigerant flowing to the secondary or cooling coil or expander does not pass through the liquefying unit, does it?

A. It does not.

Q. In the accused refrigerator the refrigerant flows through the secondary or cooling coil after it becomes vaporized in the heat-absorption section of the secondary, said vaporized refrigerant is recondensed in the coil section of the secondary system at the secondary cold transfer plate, is that correct?

(Testimony of Norman S. Parker.)

A. Yes: that's correct, being condensed by the refrigerant that passes across the primary plate [950] 104.

Q. So that in the accused refrigerators there is a liquefying unit in the freezing expander circuit, and there is another liquefier or condenser in the cooling expander circuit? A. Yes.

Q. A volatile refrigerant circulating through said expanders being the sole heat-extraction medium. Now, in the patent in suit there is disclosed only one volatile refrigerant, and that one refrigerant passes through a circuit and passes through both the freezing coil and the cooling coil?

A. Correct.

Q. And that is the sole extracting medium?

A. That is right.

Q. In the accused refrigerators there are two separate and distinct volatile refrigerants, as we have brought out several times?

A. That is right.

Q. In the accused refrigerators one volatile refrigerant flows exclusively through a freezing coil or expander and constitutes the medium for extracting heat from the freezing compartment through said freezing coil and expander.

A. May I have that again. I wasn't sure I got it all.

Q. In the accused refrigerators one volatile refrigerant flows exclusively through the freezing coil and constitutes the medium for extracting heat from

(Testimony of Norman S. Parker.)

the freezing compartment [951] through said freezing coil?

A. I wouldn't say that that flowed exclusively through the freezing coil. The coil on the transfer plate 102 is the coil which withdraws heat from the secondary transfer plate, and it flows through that, also, and it does extract the heat from the frozen food locker.

Q. Well, but the one refrigerant in the primary circuit is the sole means for extracting heat from the freezing compartment?

A. That is correct.

Q. Now, in the patent in suit the thermostat is responsive to the temperature in the cooling compartment; is that correct? A. Yes.

Q. In the accused refrigerators there is no thermostat in either the freezing compartment or the cooling compartment, is there?

A. The thermostat structure is not actually in there. There are bulbs responsive to temperature of the two compartments.

Q. But they are not in the compartment?

A. They are not in the interior of the compartments; they are within the sleeves, just outside the sleeves. In that sense they were in the insulation, and, in my opinion, that would be in the [952] compartments.

Q. That would bring up the same question of what is a cooling compartment and what is a cabinet?

A. That is right; and on that we differ.

(Testimony of Norman S. Parker.)

Q. In the patent in suit it talks about the flow of heat into the cooling compartment 14 and the rise of temperature of the air therein, that the thermostat 31 functions to start a liquefying unit before the freezing compartment approaches a non-freezing value. A. That is correct.

Q. In the accused refrigerators there are two thermostats or temperature controls, one being a primary control located outside of the freezing compartment and the other being a secondary control located outside of the cooling compartment; is that correct?

A. I would substitute "sleeve" for "compartment" in those two statements.

Q. Well, that is awfully technical, don't you think?

A. No, I do not think so at all.

Mr. Cuningham: If your Honor please——

Mr. Byron: I am asking for——

Mr. Cuningham: These are obviously tricky questions.

Mr. Byron: Tricky questions? I think they are tricky answers.

The Court: Both remarks of Mr. Cuningham and Mr. Byron are stricken. [953]

Mr. Byron: Good.

Mr. Cuningham: Thank you, your Honor.

Mr. Byron: I thank you, too. We are all happy about it.

Q. The primary control outside of the freezing compartment controls the starting of the motor com-

(Testimony of Norman S. Parker.)

pressor set to maintain below-freezing temperature in the freezing compartment in the accused refrigerators; that is correct, is it not?

A. Will you read that again? I think there was a noise outside. I couldn't hear.

Q. Yes. The primary control of the freezing compartment controls the starting of the motor compressor set unit to maintain a below-freezing temperature in the freezing compartment in the accused refrigerators and independently of the temperature in the cooling compartment.

A. I am not so sure that it is independently of temperature of the cooling compartment.

Q. Your attention is directed to Plaintiff's Exhibit 4-CC-2 and to Pages 2 and 3. I would like to ask you to refer to that (presenting pamphlet to the witness).

Mr. Cuningham: That is Pages 1, 2, 3, or 2, 3, 4, what parts?

Mr. Byron: I will tell you.

The Court: Perhaps Mr. Byron can point it out to Mr. Parker. [954]

The Witness: Well, 2 and 3 is what I have to look at.

As I understand the operation of the primary system, the primary control is operated—operates to make and break the motor compressor circuit, and the primary control in the Figure 5 shown at the upper right hand of Page 3 of the exhibit which you have handed me is located apparently on the upper locker tubing at a lower part of that tubing.

(Testimony of Norman S. Parker.)

Q. That is the freezing compartment section?

A. That is a freezing compartment section, so when the freezing compartment calls for refrigeration it actuates that control; however, I notice at Page 1 of this same exhibit, the second column, this statement:

"Also less insulation is used between the locker and moist cold compartment and, consequently, the top of the moist cold compartment is cooled somewhat by the bottom of the locker."

In other words, there is an exchange of the heat between the two lockers, and the cold from the upper locker affects the lower locker, which is another way of saying that the heat from the lower locker affects the temperature of the upper locker, and, of course, a thinning of the insulation between those two sleeves comes at the point where the primary control is indicated in Figure 5 of this exhibit, Page 3, so I would think that there is a response not only to the heat in the freezing compartment but also to the [955] passage of heat from the lower compartment. In other words, this control which makes and breaks the motor compressor circuit responds to the temperature conditions, to some degree, within both sleeves.

Q. Now, going back, in the accused device there is a thermostat associated with the freezing compartment which operates the switch for starting the motor in action and causing it to stop; that is correct?

A. That is correct.

Q. Then there is associated with the cooling com-

(Testimony of Norman S. Parker.)

partment in the accused device another thermostat; is there not? A. That is correct.

Q. Now, the thermostat associated with the freezing compartment can set the system in operation for cooling the freezing compartment only?

A. No, that would hardly be a fair statement. The operation of the switch controlled in response to the temperature—or, rather, operated by the bulb outside of the sleeve of the freezing compartment, that control is the only control which directly controls the motor circuit. However, there is always some, or there would tend to be some passage of heat—wait a minute. I had better have your question again to make sure I am not wandering.

Q. I think so. Let me put it this way. Maybe it is simpler. The motor compressor set can be set into operation [956] for extracting heat from the freezing compartment only; that is correct—in the accused device?

A. I am not sure whether I fully understand or completely agree with that statement because I have said——

Q. Let me read it to you.

A. Oh, I know what it says. What I am referring——

Q. Now——

Mr. Cunningham: I object, your Honor. I think he ought to complete the answer.

Mr. Byron: I am just trying to be helpful.

The Witness: To be frank with you, it seems to

(Testimony of Norman S. Parker.)

me that the two sets of statements in this exhibi are contradictory. In other words, there is shown a setup or system which is described as if there were no influence on the thermostat by the temperature in the warmer compartment, but they go ahead and say that they have thinned out the insulation so that there is a heat exchange between the two compartments, and so, to me, there is a contradiction between those two sets of statements.

Q. That is your interpretation?

A. That is my interpretation.

Q. Now, just referring to Pages 2 and 3, however, of this particular exhibit, Plaintiff's Exhibit 4-CC-2, just those two pages, on just those two pages there are statements of the operation there in which heat is extracted only from the [957] freezing compartment when the thermostat associated therewith is actuated. A. That is correct.

The Court: Is that the manual of Admiral?

Mr. Byron: That is right.

The Witness: It is an Admiral manual, your Honor.

Q. (By Mr. Byron): Then the thermostat associated with the cooling compartment operates on a valve for controlling the passage of the refrigerant through the refrigerating coil or through the refrigerating coil and the cooling coil; right?

A. That is correct.

Q. So that the heat may be extracted simultaneously from both the cooling compartment and the freezing compartment, and totally separate from

(Testimony of Norman S. Parker.)

that heat can be extracted from the freezing compartment only in the accused refrigerator; right?

A. That is correct.

(Discussion off the record.)

Q. (By Mr. Byron): Mr. Parker has referred to a long hypothetical question which was put to you this morning. A. A very long one.

Q. I would like to ask a few questions about that.

In giving your opinion as to a reasonable royalty, did you take into account all of the factors set out in that [958] hypothetical question?

A. I tried to.

Q. Would your opinion be changed if it developed that some of the facts included in the hypothetical question were not correct, as a matter of fact; for example, that Potter or Bronaugh and Potter were not the first to disclose or provide in a single compact unit for household use a compartment for the preservation of fresh foods in a moist cold atmosphere above freezing temperature and a separate compartment for freezing and preserving other foods safely and for long periods of time in frozen state at temperatures substantially below the freezing temperature; that such refrigerators for the first time brought refrigeration of the kind claimed to the home; that such refrigerators for the first time provided a household unit wherein without the use of covered pans the moisture of the food stayed in the food instead of being dried out; that

(Testimony of Norman S. Parker.)

such refrigerators eliminated the frosting and defrosting of the chilling element in the compartment for the preserving of foods at temperatures above freezing and that such refrigerators——

The Court: Is this one question?

Mr. Byron: Yes. I said for example. Well, I will cut it off there. I will break it up.

The Court: I think Mr. Parker knows. Were all those [959] statements assumed by you to be true?

The Witness: Yes, your Honor.

The Court: Each and every one of them?

The Witness: That is right, your Honor, for the purpose of that answer.

The Court: In other words, you did not draw upon your own knowledge of the state of the market nor of the truth of the statements, but you solely assumed that all of the facts given to you were true?

The Witness: That is correct, your Honor.

The Court: Go ahead.

Q. (By Mr. Byron): In arriving at your answer to this hypothetical question, did you take into account competition in the particular field of household electrical refrigerators?

A. Was that mentioned in the hypothetical question? It is so long that I cannot remember it.

Q. I think it was.

A. If it was not mentioned in the question, I did not take it into consideration.

Q. Well, it spoke about other companies manu-

(Testimony of Norman S. Parker.)

facturing refrigerating apparatus and trying to do the wonders of Potter, and so that is included.

A. Well, I read the question rather carefully before I answered it, and I tried to keep all of these hypotheses [960] in mind, with some difficulty, and my answer was on the basis that all of these very favorable hypotheses, shall we say, were correct.

Q. If you knew or had reason to believe the hypothetical patents were invalid, would that fact influence your opinion as to what a reasonable royalty should be?

A. If the hypothetical patent is now hypothetically invalid, I would say that there should be no royalty paid at all. In other words, you do not pay royalties for an invalid patent.

Q. If no refrigerators were produced by or under the hypothetical patent, would that influence your opinion as to reasonable royalty?

A. No.

Q. If the hypothetical patent you are considering had no provable commercial success, would that affect your opinion as to reasonable royalty?

A. Assuming that all the other hypotheses were correct, I would say that it would not.

Q. I have one question down here. I think you have answered it already, but I will just put it to make sure that it is in.

Mr. Cuningham: If the question has been answered, why put it in again?

Mr. Byron: I said I think it has been. I may be wrong. [961]

(Testimony of Norman S. Parker.)

The Court: Go ahead.

Q. (By Mr. Byron): If the hypothetical patent is invalid, should any royalty be paid thereon?

The Court: He has already answered that.

Q. (By Mr. Byron): Would a license taken under an invalid patent have any value?

A. I cannot see why.

Mr. Byron: That closes the cross-examination.

Redirect Examination

By Mr. Cheatham:

Q. Mr. Parker, if food were placed in Defendants' Exhibit 117, which is the secondary system and the liner attached as you see it there on the floor, could it be cooled by that piece of apparatus?

A. You mean by that piece of apparatus alone?

Q. That is right.

A. That includes those—carries the secondary system through to the secondary contact plate?

Q. And stop right there. A. No.

Q. If I understand you correctly, it is only when Defendants' Exhibit 117 is combined with Defendants' Exhibit 117-A in the manner taught by the——

Mr. Byron: Well, now, I don't like to be too serious [962] in making objections, but this is rather leading, I think, isn't it?

The Court: This is redirect.

Mr. Byron: Redirect, I know, but even so——

The Court: That is what I am talking about. He cannot do what you can do. You can ask leading

(Testimony of Norman S. Parker.)

questions, but this is his own witness, and he cannot ask leading questions.

Mr. Cheatham: I will change it, then.

Q. What would be the effect on your answer if Defendants' Exhibits 117 and 117-A were combined in the combination of Admiral refrigerator Exhibit 10-A?

A. Well, on the basis of the description of the Admiral machine, Admiral refrigerator——

Mr. Byron: Your Honor, again this is not proper redirect examination, as I understand it.

The Court: May I have the last question read.

(Last question read.)

The Court: I am going to give him wide latitude. Go ahead.

The Witness: On the basis of statements in the Morton patent about which I have testified and in the Admiral service manuals, the heat-conductive connection between the two transfer plates then makes, completes the machine, and it will function as a refrigerator when the primary system is [963] cycling.

Q. What is the effect on the primary thermostat which controls the on-and-off cycling of the system, of the primary system of heating the interior of the cooling compartment?

A. Well, I have never tried that. I would have to—all I can say is that the last Admiral service manual about which I testified on cross-examination indicates a heat leak or a heat path between the

(Testimony of Norman S. Parker.)

upper part of the secondary sleeve and the lower part of the primary sleeve so I would expect that heating the interior of the lower compartment would have an effect and would certainly have some effect on the operation of the heat-responsive member which controls the motor switch, motor [964] circuit.

Q. (By Mr. Cheatham): Did I understand you correctly to say that there is no difference in the insulation shown in the Potter-Bronaugh Reissue Patent 23,058 and the insulation shown in the Anderson Patent 1,439,051?

A. Well, if I did say that I was doing it by mistake, because I certainly had no such idea. The Bronaugh and Potter patent has differential insulation in the sense that the insulation is thicker around the freezing compartment, whereas in Anderson the thickness of the insulation throughout the walls of both compartments and between the two compartments is of uniform thickness so far as you can tell from looking at the drawing, and nothing is said about that matter in the patent itself.

Q. Did I understand you to testify that Admiral did not have a finned coil in the cooling compartment or its equivalent?

A. Why, they don't have a finned coil in the sense that Bronaugh and Potter have a finned coil. Of course, Mr. Morton describes this transfer plate as fins, so there is some latitude, possibly, in describing what a fin is. If you use the term as broadly

(Testimony of Norman S. Parker.)

as he did a fin might be any plain surface, or flat sheet or thin sheet.

Q. And are all of the elements of the Potter and Bronaugh Reissue Patent 23,058 old by themselves?

A. Yes; they are all old.

Q. Mr. Parker, have you noticed any corrections which you may wish to make in the testimony which you gave on direct [965] examination?

A. Yes. There are three or four or five pages there where some mistakes were made which seem not to indicate what I thought I said or intended to say.

Q. Can you point them out to me?

A. I can if I have a copy of the transcript.

The Court: Do you know what pages they are on?

The Witness: I marked the mistakes myself, your Honor, in pencil on the back of this after I read it. At page 755, line 7, the word "gap" should be "gas," and the word "evaporator"—two occurrences there—should be "vapor."

The Court: Is that the nature of all of your corrections?

The Witness: Something of that order, yes, your Honor.

The Court: Oh, well, you just tell that to Mr. Lucas a little later and show him where the corrections are. There is nothing of any fundamental character at all?

The Witness: No, nothing.

The Court: Mr. Parker has to take a plane

(Testimony of Norman S. Parker.)

pretty soon and we are trying to get him out of town. He is coming back, though.

Mr. Cheatham: No further questions, your Honor.

The Court: I had one question, Mr. Parker. In the hypothetical question that was propounded to you you stated that you assumed the truth of the rather favorable statement—I think those were your words—in the question, and that [966] you did not take into consideration your own information or knowledge of the elements set forth in the statement. Am I correct in that?

The Witness: Well, I would put it a little differently; that is, that I understood that this was a hypothetical question; that I was bound by the hypotheses, and that is all that I considered were the hypotheses of that question. Of course, there is much material in it which relates to matters which are entirely outside of anything that I have had occasion to determine. They got a long ways from the patent field.

The Court: I will tell you precisely what concerned me. Do you mean to imply that you considered the statements in the question literally and that even though you knew that some of the statements were incorrect you disregarded your own information and took the information set forth in the statement?

A. No, I don't—I am not conscious of having any information of my own which is contradictory to any of the statements.

(Testimony of Norman S. Parker.)

The Court: That's precisely what I had in mind, and I thought that maybe your statement was not clear in that regard. In other words, you are vouching for the truth of the statement so far as you know?

A. Yes, I have—there is nothing in the hypothetical question which I have any reason for questioning. What I had [967] in mind when I made that little remark which I probably should not have made is simply this: That the rate of royalties must inevitably, assuming that a reasonable royalty is arrived at—it must inevitably depend upon the place of the invention in the art, that and other factors, such as the previous condition of the prior art and so forth. But I have no information which in any way traverses any of those hypothetical statements.

Recross-Examination

By Mr. Byron:

Q. You do not know as a fact that all of those statements are accurate, do you?

A. I would have to go back and read that question through to answer that.

The Court: Well, I think that he has already indicated that he took the statement as true without regard to his own knowledge and that on many things he had no knowledge. Is that right?

The Witness: That would be correct, yes. No direct knowledge.

Mr. Byron: No further recross-examination.

Mr. Cuningham: Well, if your Honor please, it seems a bit late to start another deposition.

The Court: We will quit. Mr. Parker, you are excused [968] and you can go home.

Mr. Cuningham: If he comes back Monday morning, your Honor. We would like to have him then.

The Court: I am going to say that Mr. Byron—do you want Mr. Parker any more?

Mr. Byron: No, sir, I don't.

The Court: Well, then, as far as I am concerned he is excused. Do you want me to issue an order requiring him to come back?

Mr. Cuningham: No, your Honor. I just want to impress upon him that I would like to have him come back.

The Court: There is no order against you, Mr. Parker, but I understand Mr. Cuningham would like to have you come back Monday morning.

(Witness excused.)

The Court: Today is Tuesday and we are going to have one more day of trial before the recess. Is 9:30 a pretty good hour?

(The jurors nodded in the affirmative.)

The Court: If we start a little earlier we can go home a little earlier.

Now, I want to tell you once again that you haven't heard all the case yet. You haven't even heard all of plaintiff's case. Please keep an open mind. I think that probably [969] many of you are

in the same position as I am, but there is a lot of information and evidence that has come into the record, and at this time we don't know its place in the whole case. I remember many of the questions which Mr. Byron was asking Mr. Parker and that Mr. Cuningham was asking or Mr. Cheatham. I couldn't see the relevancy of that, but that is what is going to be cleared up. The relevancy of this testimony both on direct and cross-examination will be made apparent to you if the lawyers do their job in the final argument. You won't know how this case should be decided until after you have heard that evidence discussed and until you hear what I have to say about the law. I am not telling you what I think about the law until that time. I say this all the time because I know that there is a tendency to make up your minds. That is a tendency that everybody has. I am subject to the same thing. So that is why I know. Please guard against it.

You are now excused until 9:30 tomorrow morning. We don't want anybody to go out of town and not come back. We need you.

(Whereupon the jury was excused.)

The Court: Mr. Cuningham, do you think you will finish tomorrow?

Mr. Cuningham: I certainly hope so, your Honor. I think we will. [970]

The Court: Have you any live witnesses?

Mr. Cuningham: Well, I wonder how we can arrange it. You see, I do want, as I indicated this morning before this session, another witness. And

then I have, of course, the Morton deposition we have talked about. That is only an hour or roughly that or a little less, probably, and then I have some skipping to do through that large volume of various witnesses, but that shouldn't take too long.

Now, when that other witness becomes available to me and I should think we could work out some plan——

The Court: You mean on the offer of proof?

Mr. Cuningham: No, your Honor; on the matter I spoke to you about before this morning on the question of proportionate insulation. I asked to have the chief engineer of Admiral who is on the list tell us about that.

The Court: Is the chief engineer here?

Mr. Byron: Yes.

The Court: Mr. Bohman?

Mr. Cuningham: I understood he wasn't coming till Monday. I wish I had known that. I would have put him on the stand today. The information was he wouldn't be here till Monday. That's what I understood.

Mr. Kolisch: No, "he will be here Monday."

Mr. Cuningham: Oh. "He will be here Monday."

Mr. Byron: Sure. [971]

Mr. Cuningham: Can we start with him tomorrow morning?

The Court: Certainly. There is no reason why you shouldn't.

Mr. Cuningham: Well, then, I think, your Honor, we will take part of the day; I hope not the whole day. I want to make that statement subject

to my review of the exhibits and how much we have got left to clean up.

The Court: I thought that it might be desirable if you would submit your offer of proof sometime Friday when the jury isn't going to be around and you can get all that out of the way.

Mr. Cuningham: Your Honor, I think that is an excellent suggestion. It hadn't occurred to me and I would be glad to do it.

The Court: Is that all right with you to take it up Friday?

Mr. Byron: Yes, indeed.

The Court: Then we can save some time when the jury is not here.

Mr. Cuningham: I would be glad to, sir.

(Discussion off the record.)

The Court: Recess until tomorrow morning at 9:30.

(Whereupon, at 4:00 o'clock p.m., proceedings herein were adjourned until 9:30 o'clock a.m. Wednesday, November 23, 1955.) [972]

November 23, 1955, 9:45 A.M.

(Proceedings herein were resumed pursuant to adjournment, as follows:)

The Court: Parties ready in the Moist Cold case?

Mr. Cuningham: Yes, your Honor.

Mr. Ramsey: Yes, your Honor.

Mr. Cuningham: May I call Mr. Ray Bohman?

The Court: Yes.

RAYMOND H. BOHMAN

was produced as an adverse witness in behalf of the plaintiff and, being duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Cuningham:

Q. Mr. Bohman, what is your name, residence and present occupation?

A. Raymond H. Bohman, 227 West Losey Street Galesburg, Illinois, and I am Chief Development Engineer, Admiral Major Appliance, the Midwest Manufacturing Division at Galesburg.

Q. Are you familiar with the Admiral product exemplified by Plaintiff's Exhibit 10-A?

A. I am.

Q. Mr. Bohman, does the insulation of the cooling compartment in that exhibit permit greater heat inflow than does the [973] insulation of the freezing compartment in that exhibit?

A. Would you qualify your statement?

Mr. Cuningham: No. I would like an answer to my question, your Honor. This is a hostile witness and I think I am entitled to a Yes or No answer.

The Court: Are you an officer of the Admiral Corporation?

The Witness: I am the Chief Development Engineer, sir.

(Testimony of Raymond H. Bohman.)

The Court: As a matter of law, he is not a hostile witness and until he shows some hostility the man——

Mr. Cuningham: I misspoke myself. I think adverse witness, your Honor, is better. He is here, as I understand it, for the purpose of testifying for the defendants.

The Court: Are you in a position to answer that Yes or No?

The Witness: I would like to have a little further explanation on the question. Does he mean——

The Court: Do you understand the question?

The Witness: Not entirely, sir.

Mr. Cuningham: May I repeat it, sir?

The Court: All right. Repeat it.

Q. (By Mr. Cuningham): Does the insulation of the cooling compartment in Plaintiff's Exhibit 10-A, the Admiral refrigerator here (indicating), permit greater heat inflow than does the insulation of the freezing compartment in that exhibit?

A. Do you mean per unit area or for the entire cabinet? [974]

Q. I mean as it stands on the floor. It's a very simple question.

A. The heat inflow?

Mr. Cuningham: May I have a Yes or No answer, your Honor?

The Court: Well, if the man can't give it—you refused to answer his other question, Mr. Cuningham. He asked you a question. He doesn't under-

(Testimony of Raymond H. Bohman.)

stand the nature of the question. Perhaps it's more complicated than you think.

Mr. Cuningham: Very well, your Honor. I will take his answer.

The Witness: The heat inflow per unit area is the same in both compartments. The insulation material is the same and the thickness is substantially the same throughout the cabinet.

Q. (By Mr. Cuningham): Now, did not you and I have a conversation a few minutes after the jury left this courtroom last night?

A. Yes, we did.

The Court: Mr. Cuningham, I just want to say to you that under the rules here if you take the stand you can't argue the case and you should attempt to impeach no one unless you are willing to take the stand.

Mr. Cuningham: My purpose, your Honor—was not trying to impeach the witness; I am trying to clarify in my own mind—he made a statement to me that apparently, as far [975] as I can now tell, would like to know if I misunderstood.

The Court: All right. Go ahead. I just want you to be acquainted with our rules, that's all.

Q. (By Mr. Cuningham): Do you mean by that answer, Mr. Bohman, that the heat inflow into each of those compartments in this refrigerator here is precisely the same? A. Heat inflow?

Q. With the door closed.

A. Heat inflow depends upon a lot of factors Mr. Cuningham

(Testimony of Raymond H. Bohman.)

Q. Well, I wish you would explain your answer.

A. Given like conditions, the same temperature difference across the insulation cavity per any given unit of area one square foot, we shall say, the heat flow into the food compartment would be substantially the same for that given one square foot of area as it would be into the freezer compartment. The insulation thickness is substantially the same and the material is the identical throughout the cabinet.

Q. Why do you qualify thickness by the word "substantially"? What is the difference?

A. There are a point or two upon the cabinet where there are some very small differences in dimension. If you like, I can point them out.

Q. I wish you would to the jury.

(Whereupon the witness leaves the stand for the purpose of demonstration.) [976]

A. When this cabinet is insulated either a Fiberglass batt such as you see here is used on the sides, across the top, on the other side, and across the back, and that batt is three inches thick. If the cabinet is insulated by blowing a loose insulation fill, a wooden form or wooden and metal form is placed into the cabinet and the insulation is blown in by air pressure. That form has substantially straight sides across and takes the shape—general shape of the liner which you see over here (indicating).

Mr. Byron: The exhibit number?

The Witness: Exhibit 117, Defendants' Exhibit

(Testimony of Raymond H. Bohman.)

117. The form also includes the space required for the freezer chest, the Defendants' Exhibit 117-A. So that substantially you get uniform thickness of insulation around the cabinet.

Now, there is a spot right here (indicating), we call it the cabinet offset, where the compressor sets in on this bottom rail. At that point the insulation is somewhat less than three inches in thickness, approximately 1⅞ or two inches, if I recall correctly. But that is only in that particular spot. That was the reason I gave you the answer that I did.

Q. (By Mr. Cuningham): Have you included in your answer this additional material back here, and if not, will you please do so, this heavy insulation here (indicating)? Where does that go? [977]

A. That fits——

Q. Is that correct?

A. That is correct. And this fits over the back as is shown here (placing insulation inside refrigerator).

Q. Is that further reason why you qualified by using the word "substantially"? A. Yes.

Mr. Cuningham: Your witness.

Mr. Ramsey: No questions.

Mr. Byron: No cross-examination.

(Witness excused.)

Mr. Cuningham: Now, if your Honor please, I would like to read the Morton deposition, and I think before doing so I should—I want to point out, does your Honor have a copy of this? I have only

one. I would like to point out that there is a motion to strike that Mr. Byron told me about beginning on page 310 at the bottom, a question there.

The Court: 310?

Mr. Cuningham: Yes. At the bottom, the last question.

The Court: There is no 310 on this one.

Mr. Cuningham: 310, sir.

Mr. Kolisch: I am sorry.

Mr. Cuningham: The Morton deposition.

Here we have a photostat here.

The Court: That's all right. One is coming up right now. [978]

(Whereupon the crier hands a copy of the Morton deposition to the Court.)

Mr. Cuningham: Now, may I say just this——

The Court: The last question on there?

Mr. Cuningham: No, sir. It starts with the last question on 310 and runs through to the—about the middle or below the middle of 314.

Now, perhaps your Honor would like to read those pages. We do not, of course, want the colloquy, but we do want in the testimony the answers of the witness, and we want, particularly, your Honor, the end of it, beginning about the middle—well, it's the last question on 313 and the testimony at the top of page 314. That is a little different subject, I think, and it is capable of that division. There is no other motion to strike and we have been over this and we will go right through it.

The Court: The motion to strike is allowed.

Mr. Cuningham: In toto, sir, to 313?

The Court: Yes. [979]

Mr. Cuningham: Now, I state for the record that this deposition was taken on April 28, 1955, at the offices of the Admiral Corporation in Chicago.

Mr. Byron: That is not correct. I am not criticizing it, but it is not correct.

Mr. Cuningham: You are right. I think it was June 1st, as I read the notices.

Mr. Byron: That is right.

Mr. Cuningham: I was wrong, June 1st, 1955, and, as appears on Page 294, it was taken for the purpose of discovery, the last word in the paragraph, 294.

The Court: Are you going to read the entire deposition?

Mr. Cuningham: Except the part that has been stricken, and that, of course, we take care of Friday.

The Court: Go ahead.

(Thereupon the deposition of Evans T. Morton was read into the record as follows, with Mr. Cuningham reading the questions; Mr. Hart, the Court Crier, reading the answers; and Mr. Lucas reading the defendants.)

DEPOSITION OF EVANS T. MORTON

"Q. What is your name, residence and occupation?

A. Evans T. Morton, Gilbert Park, Knoxville, Illinois.

(Deposition of Evans T. Morton.)

Q. And your occupation?

A. Director of engineering for Admiral Corporation, Vice-President [980] of the Midwest Division.

Q. And how long has that been you have held that title?"

Mr. Cuningham: Well, this colloquy, I think we should read, your Honor. It has a bearing on the purpose of the deposition.

The Court: Very well.

"By Mr. Byron: Have you indicated how this witness is called?

By Mr. Cuningham: No.

By Mr. Byron: It may be well to do that.

By Mr. Cuningham: All right. I will state on the record that we meet here pursuant to an agreement made since the last deposition on April 28, 1955. The notice of the intention to examine Mr. Morton and Mr. Douglas was given on the record at that time but the date was fixed later by agreement.

By Mr. Byron: Do you want to bring out the fact it is a discovery deposition?

By Mr. Cuningham: You make any statement you want on the record.

By Mr. Byron: No.

By Mr. Cuningham: It is understood that this is a pre-trial discovery deposition of the defendant intervener, [981] Admiral Corporation.

(Deposition of Evans T. Morton.)

By Mr. Byron: Yes, taken by the plaintiff.

By Mr. Cuningham: Correct.

Q. (By Mr. Cuningham): Mr. Morton, how long have you been director of engineering for Admiral Corporation?

A. That particular title was given to me sometime early in 1950.

Q. And how long have you been vice-president of Midwest Division?

A. Approximately two years.

Q. I think it will save us a little time if you would just give me a brief statement of your history with the Admiral Corporation and when you came with them.

A. I started with Admiral Corporation February, 1944, and I think the official title at that time was design engineer. In any case I have been in charge of all the design and development engineering of the appliances, that is, of the refrigeration line, since that date, and since 1950 of all the appliances.

Q. And what was your occupation prior to your association with Admiral?

A. Just prior I was chief engineer of the Indianapolis plant of the—pardon me, chief inspector of the Stewart-Warner plant at Indianapolis. [982]

Q. For how long had you been chief inspector?

A. Just a little over a year in that position.

Q. That is, from roughly the end of 1942?

A. Yes, about the first of '43 to February, '44.

(Deposition of Evans T. Morton.)

Q. And prior to the first part of 1943 what was your occupation?

A. A very short period during the war as project engineer, and previous to that in charge of Stewart-Warner's development laboratory.

Q. For how long?

A. Since August of 1936.

Q. So you were in charge of the Stewart-Warner developmental laboratory?

A. That's right.

Q. Since August of 1936? A. Right.

Q. Up to sometime in 1943?

A. Approximately the spring of 1942 when the war was under way.

Q. What was your principal concern in the development laboratory of Stewart-Warner, refrigerators?

A. Refrigerators, yes.

Q. Did you have anything to do with the other Stewart-Warner products, you personally?

A. A limited amount. [983]

Q. Had you had any previous experience prior to August, 1936, in refrigeration?

A. Approximately two years with Norge.

Q. That is, Norge is a division now of Borg-Warner or Stewart-Warner? I forget.

A. Borg-Warner. It was at that time also.

Q. What were your duties with the Norge Division of Borg-Warner?

A. Laboratory engineer.

Q. Concerned primarily with refrigeration?

(Deposition of Evans T. Morton.)

A. Entirely.

Q. That is household refrigeration?

A. Right.

Q. Well, we have gone back pretty far, Mr. Morton. What did you do prior to that?

A. Prior to that year you would go into college, and I graduated from the University of Michigan.

Q. Formal education in engineering?

A. Yes.

Q. Well, you seem to have spent over twenty years actively in household refrigeration business, is that correct? A. That's right.

Q. Admiral took over Stewart-Warner's household appliance business, didn't it, in 1944, or thereabouts? A. Yes, sir. [984]

Q. And it was at that time that you came to work for Admiral, is that correct?

A. Yes; I was not part of the deal. It was a happenstance that I ended up with Admiral.

Q. What do you mean?

A. I resigned from Stewart-Warner before Admiral, to my knowledge at least, signed any agreement with Stewart-Warner.

Q. And then after the agreement was signed you went to work for them?

A. It looked like a good spot.

Q. Did others also come from the refrigeration appliance business of Stewart-Warner to the Admiral Corporation at about that same time?

(Deposition of Evans T. Morton.)

A. Not at that time. Some of the boys who had worked with me I later hired.

Q. You were the first to come over there?

A. That's right.

Q. I have a list of names, and perhaps you can give me a little thumbnail sketch of each of them. There is a Mr. George Heindenblut.

A. Mr. Heidenblut has been, I would say, my assistant with various titles since 1936 except for a period at Stewart-Warner during the war years and a short period after I left Stewart-Warner.

Q. He was employed by Stewart-Warner as your assistant [985] particularly or at least practically throughout your period at Stewart-Warner?

A. Yes.

Q. Is he still employed by Admiral?

A. He is still employed by Admiral, and as chief engineer of refrigeration.

Q. And he reports to you? A. Yes.

Q. Mr. Floyd Eck?

A. Mr. Eck worked for me at two or three different times or occasions at Stewart-Warner.

In other words, due to transfer it was not a continuous employment. I hired him later at Admiral, and he left us about 1949 to go to Deep Freeze, and later to Reynolds Aluminum Company.

Q. Metals? A. Yes, where he is now.

Q. Mr. Lou Carlson?

A. Mr. Carlson worked extra at Stewart-Warner, not for me but in another capacity in engineering for from about 1937 to about 1940, and worked

(Deposition of Evans T. Morton.)

for Admiral for a period from 1944 to about 1948 or '49. I am not sure of the date.

Q. And then he left Admiral but to go with someone else?

A. Yes. Now he is with Tecumseh Products.

Q. Where is that? [986]

A. That is at Tecumseh, Michigan.

Q. Mr. Walter Weinrich?

A. Mr. Weinrich worked with me at Stewart-Warner. He was there before I was. I hired him from Stewart-Warner about 1949 as resident engineer at Michigan and later transferred him to Galesburg, where he now is.

Q. Was he active in the household refrigeration field? A. Yes.

Q. And still is? A. Yes.

Q. Is that his primary concern, or do you have any reservation about that answer?

A. Mr. Weinrich is sort of a project man. He is not a graduate engineer nor has he ever functioned, I believe, strictly as such. He is primarily from a background of machining and shop work, and he has worked on projects of that nature.

Q. I notice his name appears as a patentee in one of the fairly early patents, 2,024,493, issued December 17, 1935, and assigned to Stewart-Warner, I believe, and subsequently to Admiral.

That is a patent entitled 'Refrigerator Evaporator Door.' Was he active in developmental and research work?

A. I wouldn't call it developmental work in the

(Deposition of Evans T. Morton.)

normal understanding. It is what we call gadgeteering rather than [987] engineering.

Q. And Mr. Burrise?

A. Mr. Burrise worked for Stewart-Warner Warner quite awhile before I started and up to about '47, I would think. Then he came to work for me and was under my department until approximately a year and a half ago when he was made director of quality control. I think is his proper title, at the Midwest plant for Admiral.

Q. That includes refrigerators?

A. And ranges.

Q. Mr. Schinke?

A. Mr. Schinke was assistant service manager, and he may have been service manager at the end for Stewart-Warner, and he came to work for Admiral probably late in 1944 or '45, and he is now national service manager for Admiral or director of sales, I don't know just which.

Q. Where is he located?

A. He is located in Chicago here, I think on East Water Street. I didn't pay much attention to that.

Q. In the service department? A. Yes.

Q. Can you think of any others that have come over from the Stewart-Warner refrigeration department to the Admiral Corporation?

A. No, I can't.

Q. What became of Mr. Iwashita? [988]

A. Mr. Iwashita is now with General Electric

(Deposition of Evans T. Morton.)

Company, and I believe his title is manager of the air conditioning division.

Q. What was his position with Stewart-Warner? A. He was assistant chief engineer.

Q. That is, he was the assistant to you, is that it? A. No.

Q. You were chief inspector?

A. No. I was chief inspector at the end, and I was in charge of laboratory engineering. During the refrigeration period I was in charge of the laboratory.

Q. Was Mr. Iwashita in the laboratory of Stewart-Warner?

A. He was assistant chief engineer of the engineering department, covering all engineering.

Q. That is not just refrigeration?

A. That is not just refrigeration. In other words, the laboratory is only just part of our function. There is project engineering and things like that.

Q. I see. Who was chief engineer of Stewart-Warner?

A. Two of them during the period I was there. There was Charles R. D'Olive and Russell Ayres.

Q. Where are those two people now, if you know?

A. Mr. D'Olive is on an engineering setup very similar to a manufacturer's representative setup.

Q. Is that here in Chicago?

A. I believe his headquarters are at Wilmette or one of [989] the north suburbs, I am not sure.

(Deposition of Evans T. Morton.)

Mr. Ayres is chief engineer of the St. Paul plant of Seeger-Sunbeam Corporation.

Q. Mr. Morton, what was the first household refrigerator embodying what I shall dub the moist cold feature. You understand what I mean by that, do you? A. Yes.

Q. What was the first household refrigeration that you know of?

A. A model refrigerator built at Norge in about 1934.

Q. Was that a commercial project at all?

A. A version of that refrigerator was produced by Norge in either 1935 or 1936.

Q. Did that involve two temperatures and two compartments, one compartment being dry cold and the other moist cold?

A. I think it could be interpreted that way. It was an evaporator with a high temperature sleeve with low temperature shelving within the evaporator, built with one food liner.

Q. That is, the low temperature sleeve was designed for the storage of frozen foods in quantities, or was it not?

A. Probably one and one-half cubic foot size.

Q. Did it maintain a humid atmosphere in the main compartment?

A. I don't remember the figures, but it was a higher temperature than the so-called conventional refrigerators of that day. [990]

Q. That was the first one in your experience that made any effort at humidity control in the general

(Deposition of Evans T. Morton.)

food compartment, is that right? A. Yes.

Q. Did you ever hear of the Potter refrigerator? A. Yes.

Q. In what connection did you hear of that refrigerator?

A. As I became interested in refrigeration because of my job at Norge I would say I was familiar with most of the refrigerators that were on the market.

Q. And that included the Potter refrigerator of Buffalo, or did it?

A. I knew there was such a company. I cannot recall now whether I actually saw the Potter refrigerator at that date. The first refrigerator I remember with the so-called Potter principal was the Apex, I believe.

Q. I will show you a 20-page ad plus the title page of the merchandise section of Electrical Refrigerating News, February 24, 1932. That has previously been marked Plaintiff's Exhibit 3-U. I will ask you to glance through those pages, if you will, and let me know if you are familiar with that refrigerator. There are two types. There is a conventional and a moist cold type. It refers to the moist cold type. My question is directed to the moist cold type.

A. I cannot say I ever saw the picture, but I recall a [991] refrigerator of that general nature.

Q. Is it your impression that preceded this Norge development?

A. Not in my knowledge. By that I mean I knew

(Deposition of Evan T. Morton.)

of the Norge, because of circumstances possibly, but I knew of the Norge before I knew of the Apex or the Potter.

Q. Well, when and what was the occasion when you knew of the Potter or Apex refrigerator first?

A. I can't tie that to any definite time.

Q. Was it while you were at Stewart-Warner or was it while you were at Norge?

A. I believe after I was with Stewart-Warner.

Q. Did you have any part in making any tests on this so-called Potter refrigerator at Stewart-Warner?

A. I have no memory of ever running a test on the Potter refrigerator.

Q. Did you ever see one of these moist cold refrigerators of the Potter Company at Stewart-Warner's laboratory on test?

A. I don't believe I did.

Q. You don't now recall?

A. Definitely not.

Q. Who would be in charge of such testing, say in about 1935 or 1936 at Stewart-Warner?

A. Previous to the time I came to Stewart-Warner there was a gentleman by the name of Chamberlain. I don't remember his [992] first name nor do I know much about him, because he had left I could guess about four to five months before I arrived, and during that four to five months the laboratory was not in use."

Mr. Cuningham: Skipping now to the last question on Page 314:

(Deposition of Evans T. Morton.)

"Q. Now, as you have already told us, you decided the Admiral proposed business in household refrigeration was attractive; then did you have in mind a continuance of this particular structure shown in Defendants' Exhibit 111? A. No.

Q. Was it a modification of that particular structure or perhaps you can tell me from memory what it was?

Tell us in your own words, Mr. Morton, what the structure was that was contemplated at that time by Admiral in 1944?

A. Admiral gave me no specific instructions at that time except they wanted to continue the two-temperature, and the problems that arose from the Stewart-Warner system at that time were inability to service as an hermetic system and the period that Admiral was to provide that type of service system, which led us into a completely different path.

Q. Did you undertake responsibility for such a development, Mr. Morton? [993] A. I did.

Q. I think it will be easier and quicker perhaps if I can show you, Mr. Morton, the Admiral interrogatory Exhibits C through F which I am sure you are quite familiar with. They have been furnished us in this case.

Perhaps to be chronological about it I will select Exhibit C, which I might say according to my understanding is the first two-temperature Admiral construction that came on the market in, I believe, 1947 or 1948.

Could you compare that generally or point out

(Deposition of Evans T. Morton.)

changes in that refrigeration circuit over that of Defendants' Exhibit 111?

A. You are speaking now of refrigeration circuit?"

Mr. Cuningham: Your Honor, it seems to me that perhaps I should use our exhibit numbers here.

The Court: Yes, I do not know what 111 is.

Mr. Cuningham: Your Honor, I can show you it in Plaintiff's Exhibit 6-B.

The Court: Where is that exhibit?

Mr. Cuningham: I beg your pardon?

The Court: Don't you have an exhibit here?

Mr. Cuningham: Yes, it is a part of this record here, and I would like to show it, if I may, to your Honor. It is that one-page diagram. I did not mark it separately. (Presenting [994] document to the Court).

The Court: All right; tear it out of the book and mark it separately.

Mr. Cuningham: Well, your Honor, may I preserve this book and present another copy? I have another copy.

The Court: You have another copy?

Mr. Cuningham: I am afraid not here, but we do have it.

The Court: 111 is just a diagram anyway?

Mr. Cuningham: Yes, sir. The other exhibits that I should identify——

(Discussion off the record.)

(Deposition of Evans T. Morton.)

Mr. Cheatham: Your Honor, the Admiral Interrogatory Exhibits A through N, inclusive, have been identified, and are in before the Court, as Exhibits 4-CC-1 to 4-CC-14, inclusive. They have been marked, and they have been presented.

The Court: Have you told the clerk which ones you want?

Mr. Cheatham: And also which have not been presented yet, the Morton exhibits are 3-GG to 3-HH, which are exhibits which have been——

The Court: Are you going to read from the interrogatories?

(Discussion off the record.)

Mr. Cunningham: He is ahead of me, your Honor. These are simply the interrogatories, the interrogatory exhibits. [995] I identified them as A to F.

Mr. Cheatham: The one which Mr. Morton is deposing about, in comparison with Defendants' Exhibit 111 of the Stewart-Warner record, is Plaintiff's Exhibit 4-CC-3 in this case, Admiral Interrogatory Exhibit C.

The Court: All right.

"Q. (Continued): Could you compare that generally or point our changes in that refrigeration circuit over that of Defendants' Exhibit 111?

A. You are speaking now of refrigeration circuit?

Q. Yes.

(Deposition of Evans T. Morton.)

A. The refrigeration circuit in the Stewart-Warner was through cold plate with a differential pressure control which was eliminated from the Admiral. In the Admiral we cool the food compartment with a secondary system. The system was hermetic in the sections of the refrigerator where the Stewart-Warner was a valve, and a flare nut connection.

I think in general that would cover it.

Q. And you made use of a so-called primary and secondary transfer plate in the Stewart-Warner system, did you not? A. That is right."

(Discussion off the record.)

Mr. Cuningham: Mr. Lucas is absolutely right. There [996] is a mistake that I did not catch. It should be "Admiral" instead of "Stewart-Warner."

Mr. Byron: Would you read the whole question, please?

Mr. Cuningham: Yes.

"Q. And you made use of a so-called primary and secondary transfer plate in the Admiral system, did you not? A. That is right.

Q. That is not true of the Stewart-Warner box, is it? A. It is not.

Q. Now, are those the principal differences in this construction shown in the interrogatory, Exhibit 4-CC-3, over that of Defendants' Exhibit 111?

A. I believe that would have been considered the basic differences in the systems.

(Deposition of Evans T. Morton.)

Q. Now I will show you Admiral's Interrogatory Exhibit 4-CC-2 and ask you if the same is not generally true of that? A. It is.

Q. What if any major differences are there between Exhibits 4-CC-2 and the one you looked at before, Exhibit 4-CC-3?

A. Merely a modification and the design of elements; no basic differences.

Q. No basic change in the system? A. No.

Q. Is that also true of Interrogatory Exhibit 4-CC-4 and [997] 4-CC-5 and 4-CC-6, which I show you now? A. Yes.

Q. And do those exhibits illustrate the refrigeration system used in the following model numbers? Can you identify these from the model numbers? A. I can.

Q. I will read from a list furnished in the Admiral Interrogatory Exhibit 4-CC-1. Model No. 958.

A. Let me check those very early ones.

Q. That is the first one, I believe.

A. Yes.

Q. No, I have an earlier one. Model No. 759.

A. That is not an earlier one, I don't believe. I think it is a later one, modelwise. That is right, though.

Q. But it is the same refrigeration system?

A. Yes.

Q. 959? A. Yes.

Q. 1090? A. Yes.

Q. 1390? A. Yes.

Q. 1191? A. Yes.

(Deposition of Evans T. Morton.)

Q. 1192? [998] A. Yes.

Q. 1192W? A. Yes.

Q. 1292? A. Yes.

Q. 11C15? A. Yes.

Q. 12C15? A. Yes.

Q. 12C15A? A. Yes.

Q. Now, are there any other model numbers embodying that same refrigeration system, that you recall? A. Covering any particular period?

Q. Yes, from December 15, 1948, through October 6, 1953. A. I know of no others.

Q. What was the upside down combination of the two-door?

A. That was a refrigerator that was made in 1954.

Q. Did that embody the same circuit?

A. There is a different circuit in that one.

Q. That, however, had a humid cold?

A. Yes.

Q. In the general food locker, is that correct?

A. Yes. The general food compartment, freezing locker and general food compartment, yes. [999]

Q. The reason you call it that is that you had a freezing compartment below and a general food compartment, is that correct?

A. That was an advertising decision.

Q. Can you tell me in a shorter way what differences there were in that circuit?

A. It is not going to be very short.

Q. All right. A. It was a combination——

(Deposition of Evans T. Morton.)

Q. Did that embody primary and secondary sets of expanders?

A. That did not. Pardon me, I will have to retract that. There are two expanders with again a pressure difference between the expanders and with the bypass on one of the expanders. It was quite a complicated system compared to other systems we have made.

Q. Did that make use of your so-called restrictor?

A. Well, no, not in the sense that the Cold-Temp did. It did make use of the shutoff valve; similar in experience but different in action."

Mr. Cuningham: I suppose there should be a correction there. It is Dual-Temp; not Cold-Temp, isn't it?

Mr. Byron: I don't know. Leave it the way it is, what the witness said. [1000]

"Q. Those expanders were in series?

A. They were so arranged they were being put either in series or parallel.

Mr. Byron: Are you referring now to 1954?

Mr. Cuningham: Yes.

Q. These are all differences in the pre-1954 models?

A. They are different from the 1954 models. [1001]

Q. That is what I mean. I would like to ask one other question.

I direct your attention to Siragusa Exhibit 7

(Deposition of Evans T. Morton.)

which I will identify in this case as Plaintiff's Exhibit 3-FF.

Mr. Byron: Your Honor, I don't care if this goes in or not, but the fact is——

Mr. Cuningham: Your Honor, I don't either. I think I will skip it.

Mr. Byron: It has no bearing at all. It's about an experimental refrigerator that is now being worked on. The patent expired.

Mr. Cuningham: I guess we go to 324.

"Q. Mr. Morton, are you familiar with the patents owned by the Admiral Corporation on household refrigerators generally?

A. In general, yes.

Q. I hand you now what I believe to be a substantially complete volume of those patents, with an index. Could you help us out by indicating any particular patent that discloses a refrigerator or refrigerator circuits of the Stewart-Warner devices you have testified about?"

Mr. Cuningham: I should change that to Admiral. I corrected it later on.

"Q. I mean, using the same question, Admiral devices you have testified about. [1002]

A. To my knowedge there were no patents taken by Stewart-Warner on the refrigerator circuit of the nature of the one that was used.

By Stewart-Warner on the system that was used.

Q. Now, was there any attempt made to get a patent on that system, by Stewart-Warner?

(Deposition of Evans T. Morton.)

A. I do not believe there was an attempt made to obtain a patent. I am not qualified to answer that for certain, because I was not at that time in a position where that was my responsibility.

Q. Now I will ask you the same thing with respect to the Admiral Corporation structures and the Admiral Corporation patents.

I will ask Mr. Morton to identify, if he can from that volume of Admiral patents, any that will help us understand the refrigerator circuits which he has just testified about in the commercial Admiral boxes, and identify the patents with the particular circuit. This is an effort to shorten the testimony and get the information about the patents. Of course I mean the disclosure and not the claims necessarily, but just so we can understand the circuits.

A. There are two patents, and I will have to identify them for my own purposes. There is one covering the system and one covering a cabinet.

Q. The drawing would help you with the disclosure? [1003]

A. Right here (indicating). This is the system patent, the basic system patent we have got.

Q. Now will you read the numbers for the record?

A. It shows a cabinet and so forth. That is the system patent that was taken out by Admiral.

Q. Would you read the number so we will have that in the record? A. 2,586,853.

(Deposition of Evans T. Morton.)

Do you want the other patents that might apply to that system?

Q. Yes, that were disclosed.

A. 2,601,549, covering a restrictor or valve.

Q. This is as to the models you have testified to prior to the upside down model, is that correct?

A. That is right, the models prior to the upside-down model built by Admiral.

Q. Mr. Morton, those are the models I read from the interrogatory list.

A. That question was specifically directed to the refrigeration circuits?

Q. Yes. A. I believe that covers it.

Q. What have been your duties in connection with these refrigeration patents since you came with Admiral, Mr. Morton, in general? Are you actively helping Mr. Douglass in connection [1004] with these patents and the pending applications?

A. Basically to point out to Mr. Douglass developments, leaving to his judgment beyond that, and to assist him where he needs assistance which we can offer.

Q. Have you acquired certain familiarity with the patent article?

A. Some familiarity and a lot of confusion.

Q. Does that answer include the Potter patent in suit?

A. I have looked at the Potter patent, yes.

Q. I will show you a copy of the Potter patent in suit, reissue 23,058, and state the drawing and

(Deposition of Evans T. Morton.)

specification were identical with the original. Are you familiar with that?

A. I have seen it and have read it. When you say 'familiar' not in detail, no.

Q. What was your purpose in reading it? As you now recall it, of course.

A. When this last suit was brought is the first time I ever saw or read the reissue patent.

Q. Would the same be true of the original? I have a copy of that.

A. The original I was interested in and read and saw either before I left Stewart-Warner—before that, because it was a normal interest, I think, in the suit Potter had with Stewart-Warner.

Q. Just to be sure, I will show you a copy of the original [1005] patent. I think there are no changes except in the claims.

What did you do in connection with that suit against Stewart-Warner?

A. Practically nothing except read about it. I did do some—I did not directly myself do anything, but one of the men that worked for me did some work on his own for compensation for the law firm of which Mr. Hinkle was a member.

Q. And which represented Stewart-Warner in that suit? A. That's right.

Q. Did you have occasion yourself to consider this original Potter patent in the light of the prior art cited in that suit?

The Witness: Will you say that again?

(Deposition of Evans T. Morton.)

(Whereupon, the question was read as above recorded.)

A. Only in the way that we consider all the patent art at the time we developed the first Admiral.

Q. (By Mr. Cuningham): No. Not while you were with Stewart-Warner? A. No.

Q. Did you consider the Anderson patent number 1,039,051, copy of which I show you?

A. That patent also I became familiar with because of my own personal interest in the Stewart-Warner suit.

Q. Did you consider that as the closest prior art?

A. I don't think I can answer that question. [1096] I don't think I can honestly answer that question. I felt that neither one was close to what we were doing.

Q. At Admiral? A. At Admiral, yes.

Q. You did not yourself—and I am trying to get this testimony clear if I can—compare the Anderson patent with the Potter patent? A. No.

Q. Are you prepared to testify as to any differences between those two structures, the Anderson and the Potter?

A. With sufficient time for study I believe I could.

Q. Well, maybe it won't require study.

Mr. Cuningham: The answer is what?

A. The answer would be no.

Q. As I understand you, you have considered both the Anderson and the Potter patent in the

(Deposition of Evans T. Morton.)

light of the structures you contemplated at Admiral? A. Only in a very general way.

Q. Now, the Anderson patent expired in 1939? It expired in 1939, that's right, December 19, 1939. Prior to your association with Admiral, wasn't it? A. Five years prior.

Q. However, this Potter patent had not expired when you first undertook this development work at Admiral, had it?

A. The answer is it had not." [1007]

Mr. Cuningham: I will state for the record the patent referred to was the original of the patent in suit No. 2,056,165.

"Q. Did you therefore consider the original claims and their bearing upon that work at Admiral?

A. I think I should answer that question that I depended on patent counsel that we had to review our development and pretty much ignored patents in the development.

Q. You do know that this Potter patent was discussed, however, and considered by them, do you not? A. I would say yes.

Q. Did you obtain any advice from these patent lawyers with respect to the infringement of the claims of that original patent? By you I mean the Admiral Corporation.

A. I can answer that myself in that I worked directly with Glen Muffly and depended on his advice.

(Deposition of Evans T. Morton.)

Q. Mr. Muffly is not an attorney, is he?

A. He is not.

Q. What was his advice with respect to the claims of this original Potter patent?

A. Mr. Muffly in conversations I had with him felt that we were not infringing on the Potter patent. I don't recall that he specifically mentioned that one, but I do know that after review they were not in the patents that he advised we might be infringing.

Q. Did he furnish you any advice in writing as to those [1008] patents?

A. I have none that I know of. Mr. Muffly and I worked almost entirely with conferences.

Q. During what period was that?

A. I worked closely with him in 1944 and '45 and used his services less and less since that period, and very seldom any more.

Q. Were any records kept of these conferences by you? A. No.

Q. Do you recall any other correspondence or other writings regarding this advice?

A. Everything I could—I have turned over to Mr. Byron. It is very little.

Q. Is Mr. Muffly still with Admiral Corporation?

A. No, on a retainer basis for a number of years, and on occasion will make a search through his rather extensive files covering anything he may be asked about.

(Deposition of Evans T. Morton.)

Q. Now, Mr. Morton, what if any work have you done in connection with the instant suit on the Potter reissue patent?

A. With the present suit?

Q. The one in which we are now acting.

A. Nothing except spend a little time discussing it with Mr. Byron and Mr. Ramsey.

Q. When were those discussions held, approximately? [1009]

A. Approximately ten days ago, I think.

Q. Have you done any work with Mr. Muffly on this? A. No.

Q. Have you considered the claims of the reissue patent at all? A. No.

Q. You have read the claims, haven't you?

A. I have read the claims.

Q. Mr. Morton, I would like to ask you a series of questions that have been asked in this case in former interrogatories to the original defendants. They were allowed as such interrogatories and answered in a fashion by the original defendants, and I believe that without exception the answers were 'Do not know,' 'Not qualified to answer, too technical.' "

Mr. Byron: Your Honor, I think by explanation we should say that those interrogatories were directed to the president——

The Court: Yes.

Mr. Byron: What is that? The President of the Meier & Frank Company, and I believe the Presi-

(Deposition of Evans T. Morton.)

dent of the Lou Johnson Company. Of course, Admiral knew nothing about the structures.

Mr. Cuningham: That is correct.

The Court: At the time that neither Admiral nor Amana were parties to this litigation?

Mr. Byron: That's correct, your Honor. [1010]

"Mr. Cuningham: Q. Mr. Morton, I hand you this copy of the answers to the interrogatories.

I hand you now, Mr. Witness, my copy of the answers of Meier & Frank, the numbers opposite the answers corresponding to the questions I now ask you, and you will thus have before you the answers that have already been made. I believe my characterization of them is almost 100 per cent correct. There are so many I can't be sure. I have not checked them all, but will you check them and will you please try to give me the information called for in the questions? There is no information given in the answers there.

I will begin with Interrogatory No. 31 which is —no, I will skip that one. That one was answered. I will begin with Interrogatory No. 34:

'In the normal operation of the Admiral refrigerator, Model 1090, does the air in the cooling compartment have a substantially stable temperature of about 40 degrees Fahrenheit?'

A. Under use conditions, do you mean?

Q. In normal operation.

A. I would say no refrigerator has, including that one, because there is a major change in the

(Deposition of Evans T. Morton.)

temperature with any addition of loads and doors opening.

Q. With those exceptions is the temperature at 40 degrees Fahrenheit substantially stable? [1011]

A. If you will ask me if it is substantially stable under standard operating conditions with the door closed and no additional heat or food added then I would say it is substantially stable at a temperature below 40 degrees.

Q. How much below?

A. Two to four degrees, depending upon the manufacturing variances.

Q. Now question 36:

'In the normal operation of the Admiral refrigerator, Model 1090, does the air in the cooling compartment have a humidity whose relative value is 100 per cent at 32 degrees Fahrenheit?'

A. Yes.

Q. Question 38:

'In the normal operation of the Admiral refrigerator, Model 1090, does the air in the freezing compartment have a temperature well below 32 degrees Fahrenheit?' A. Yes.

Q. Question 40:

'In the Admiral refrigerator, Model 1090, does the cooling compartment have a refrigerant expander associated therewith which has heat-conducting surfaces so constructed and arranged [1012] as to be maintained during normal operation at a temperature above 32 degrees Fahrenheit while withdrawing heat from the cooling compartment

(Deposition of Evans T. Morton.)

to maintain the air in the cooling compartment at a substantially stable temperature of approximately 40 degrees Fahrenheit?'

The Witness: There is no direct answer to that question.

Q. Do you have any difficulty understanding that question?

A. There is no direct answer to a question taking in as many variable components and so forth, as you brought out there.

Q. Well, in that refrigerator does the cooling compartment have a refrigerant expander which has heat-conducting surfaces so constructed and arranged——

Mr. Byron: Put in the word 'within.' You had that in the question.

Q. (By Mr. Cunningham): I wonder if it would help you any if you took these in by eye rather than by ear. I will hand you a file copy of the same question. Well, I think I will show you my own copy.

Mr. Byron: Why don't you take the claim?

Mr. Cunningham: That is question 40.

Mr. Byron: This question is not in line accurately with the claims in issue.

The Witness: There are so many ifs connected with that [1013] question it is hard to give you an answer.

Mr. Cunningham: I am not insisting on a yes or no answer. Give me whatever answer you want.

A. I believe I would have to answer that the

(Deposition of Evans T. Morton.)

refrigerant expander indirectly retains the temperature; it does not directly withdraw the heat from the compartment.

Q. I am afraid I don't understand what you mean by the word 'indirectly.' Do you mean through some other media?

A. Through the walls of the liner. The expander in the sense you are using it here, I believe, is the tube through which the refrigerant is circulating?

Q. That is correct.

A. The expander is not in contact with the compartment itself; it is in contact on the outside walls with it.

Q. Is there any thermal conducting contact with the outside walls? A. Yes.

Q. Or is it the inside walls?

A. It is the thermal contact with the outside walls.

Q. The outside walls of the food compartment?

A. Yes.

Q. Do those function as fins for the tubes?

A. Not in the normal sense we use the word 'fins,' no.

Q. Would you explain that?

A. A fin in the term as I understand it is soldered, pressed [1014] or bonded closely, mechanically bonded or bonded by means of welding or brazing to the surrounding cool——

Q. Wait. Are these tubes attached or affixed in any way to the liner?

(Deposition of Evans T. Morton.)

A. They are attached by virtue of springs which retain.

Q. Does that make an effective thermo connection?"

Mr. Byron: I think it may be of value for the Court and jury to appreciate what that means. I can point it out if you so desire, what these things are. Now, calling attention to Defendants' Exhibit 117, the question is whether or not these coils were secured to the outside of the liner, and the witness is explaining that there are springs which pull——

The Court: Mr. Byron, this is Mr. Cuningham's deposition.

Mr. Cuningham: I was afraid it would be long, that's all, your Honor.

The Court: And he will permit you to do it with another witness. You have Mr. Glen Muffly in the courtroom?

Mr. Byron: I just thought it would be informative, that's all.

The Court: I am going to let Mr. Cuningham try his case the way he wants to, so long as he doesn't violate any rules. [1015]

Mr. Byron: Well, probably I should not have said what I did.

The Court: Where do we start?

Mr. Cuningham: "Q. Does that make an effective thermo connection?

A. If by effective you mean efficient it is not too efficient, no. That is why I differentiate between that and fits.

(Deposition of Evans T. Morton.)

Q. These are not as efficient as fins, but they serve the same purpose less efficiently, is that your testimony?

A. Fins are an extension of the primary surface which we speak of as the tube itself. The secondary surface in a coil is spoken of as the fins and would normally be an efficient bonded arrangement.

You are trying to get me to say on a matter of degree that a tube a foot from the surface would also be an inefficient arrangement of a fin, if I accepted your definition.

Q. Your liners are a so-called secondary heat-exhausting surface, are they not, in the Admiral Model 1090 and later models?

A. In the same way that a floor is a secondary surface in a floor-heated building.

Q. Have you anything else to add to that answer to Interrogatory No. 40?

A. Again, the substantially stable temperature of 40 degrees is not a true condition under use. [1016]

Q. As you have explained before?

A. Yes.

Q. Is there anything further? A. No.

Q. Now, the next interrogatory which I would be glad to handle in the same fashion if it helps any, is Interrogatory No. 42:

"In the Admiral refrigerator, Model 1090, does the freezing compartment have a refrigerant expander associated therewith which has heat-conducting surfaces constructed and arranged to be

(Deposition of Evans T. Morton.)

maintained during normal operation at temperatures well below 32 degrees Fahrenheit while withdrawing heat from the freezing compartment?'

A. On the basis of the way it is stated the answer is yes."

The Court: How about page 358, "That it is not in the precise language of the claim"?

Mr. Cuningham: Yes. That's it, sir. Thank you.

"That it is not in the precise language of the claim.

A. Speaking of the tubes as an expander the expander is not in the compartment.

Q. (By Mr. Cuningham): The next question is No. 44:

'In the Admiral refrigerator, Model 1090, [1017] is there a volatile refrigerant circulated through the expanders?' A. No.

Q. Will you explain that answer, please?

A. The question is stated on the basis of a single refrigerant going through both expanders, and that is not true.

Q. Is there a single refrigerant in each expander in the accused device?

A. This covers from 1948 to 1953?

Q. That is right.

A. There are two different refrigerants in the expanders.

Q. That is not my question, sir. If I ask you if there are two different refrigerants or two expand-

(Deposition of Evans T. Morton.)

ers perhaps you will tell me whether there is a single refrigerant in each expander.

A. There is a single refrigerant in—wait.

Are you asking if the same refrigerant is in each expander?

Q. No, sir.

A. Or the same type of expander?

What was the question?

Mr. Cuningham: Perhaps the question should be read.

(Whereupon, the question was read as above recorded.)

A. There is a single refrigerant in each expander. [1018]

Q. (By Mr. Cuningham): Thank you. The next question is No. 46:

'In the Admiral refrigerator, Model 1090, is there a single liquefying unit associated with the expanders and so constructed and arranged as to condense refrigerants expanded by heat extracted by the expanders from both the cooling compartment and the freezing compartment?' A. No.

Q. Will you explain that answer, please?

A. The liquefying unit is so arranged as to liquefy the refrigerant circulated through the freezing locker. The refrigerant of the food liner is liquefied by a condenser associated with the secondary system.

Q. Do those condensers operate independently?

(Deposition of Evans T. Morton.)

A. There is only one condenser. You don't have a condenser in the secondary system.

Q. Do I understand your testimony to be that there are two liquefying units in the whole construction, one being associated with the expander in the freezing compartment and the other associated with the expander in the cooling department?

A. Yes, sir.

Q. Are those independent of each other?

A. By that you mean will either one work independently of [1019] the other?

Q. Do they work independent of the other, as a matter of fact; to which there should be no disagreement. If we are reasonable men we don't disagree about facts.

A. It is necessary to have a condenser of a secondary system at a lower temperature than the evaporator of the same system, and on that basis the refrigeration effect is provided by the freezing locker liquefying unit.

Is that what you are driving at?

Q. The freezing effect of what? The expanders in the cooling compartment?

A. The expander in the cooling compartment. Part of that expander in the cooling compartment is attached to the condenser of the secondary system.

Q. And actuated thereby? A. Yes.

Q. The next question is No. 48:

"In the Admiral refrigerator, Model 1090, is a

(Deposition of Evans T. Morton.)

volatile refrigerant circulating through expanders the sole heat extracting medium?'

A. I would have to answer that no.

Q. Why?

A. Since there are two refrigerants.

Q. Are they both volatile?

A. They are both volatile, yes. [1020]

Q. Have you completed your answer?

A. Yes.

Q. Now Interrogatory No. 50:

'In the Admiral refrigerator, Model 1090, is there a thermostat responsive to the temperature in one of said compartments, which controls the operation of a single liquefying unit?'

A. I would answer that no, since the thermostat is outside of the compartment.

Q. Have you finished your answer?

A. Yes.

Q. Now Interrogatory No. 52:

'In the Admiral refrigerator, Model 1090, is there a single control responsive to a condition reflecting the temperature maintained in one of said compartments which controls the operation of a single liquefying unit for circulating a volatile refrigerant through the expanders?'

A. I would say no, since it circulates through only one expander.

Q. Is that your only reason for a no in answer to that question? A. Yes. [1021]

Q. Let me ask you a couple of questions:

(Deposition of Evans T. Morton.)

Mr. Morton, I will show you a copy of your patent numbered 2,061,350."

Mr. Cuningham: Just a minute. This may not be pertinent, your Honor. No, it's pertinent.

"What is the moist control in that patent?

The Witness: That particular arrangement as shown here was never actually produced. We will just check that to be sure.

That was a model that was designed, but schedules were canceled.

For this particular model the schedules were canceled out and we never produced it. It was Admiral CD746 and 946. In 1945 or 1946 was when it was originally planned for.

Q. (By Mr. Cuningham): Do you recall the reason for not going through with your plan?

A. Primarily the shortage of steel that existed at that time.

Q. And the plans were never resurrected?

A. No, not in the direction this design took.

Q. Can you tell me what patents of yours or under which you are licensed are marked on the models, the list of which I read to you?

Can you also tell me from that volume of patents or glancing through the index or drawings which ones have [1022] ever been commercially used by Admiral?

A. That would take considerable time for me to study that through.

(Deposition of Evans T. Morton.)

Q. Would you do so? You have copies of those patents.

A. If my files have not been robbed. With Mr. Ramsey, I would say I have.

Q. Maybe not today, but in this volume there was a complete list of the Admiral patents or the patents owned by Admiral, and there is a complete list of the refrigeration patents, and I am limiting it to that, under which Admiral is licensed. That information is available to you through Mr. Byron or through me, if you want it, and if you have copies, as I understand you do, of your own patents and licensed patents, would you mind advising Mr. Byron by letter so he can advise me which ones have been used commercially?"

The Court: Well, what is the relevancy of that statement?

Mr. Cuningham: Well, we were digging out the information.

The Court: Let's read only those portions which have some probative value.

"Mr. Cuningham: Q. Has Admiral Corporation issued any licenses in household refrigeration filed under any patent it owns or has license rights under?"

Mr. Byron: I think that has no pertinency here whatsoever. [1023] I think it was so settled yesterday in conference.

Mr. Cuningham: On the contrary, your Honor.

(Deposition of Evans T. Morton.)

I think it was settled as to the reverse and it was part of the hypothetical question.

The Court: Well, the man doesn't know anything so——

Mr. Cuningham: Well, your Honor, he tells us that there were a number of licensees under it. That's something.

The Court: All right. Go ahead.

Mr. Cuningham: I will skip the next answer he gave and ask the next question. [1024]

"Q. To whom is that license issued, do you recall?"

The Court: Well, he says, "I believe there is one covering a refrigerator door gasket." Now you can go ahead, "To whom is that license issued, do you recall?" Page 368.

"A. There are a number of licensees under that patent. I cannot give you the names for sure of any specific one, or the rubber companies.

Q. Can you pick out that license number there in the index?

A. The index merely gives numbers and names.

Q. Was that your patent? A. Yes.

Q. That it gets down to half a volume, anyway.

A. I believe that is 2,636,228, but I would appreciate it if you would have Mr. Douglass verify it.

Q. What date is that?

A. April 28, 1953.

(Deposition of Evans T. Morton.)

Q. Can you recall the names of any of the licensees?

A. I would not be certain of any name I would give you.

Q. But it is your impression a number of licensees are involved? A. Yes.

Q. And I suppose since the issue?

A. That's right.

Q. Do you have any knowledge of the royalty rate? [1025]

A. I am not certain myself. I believe it is in the nature of probably a cent or a cent and a half. Mr. Douglass could answer that.

Q. Per gasket? A. Right.

Q. How many gaskets are used in a refrigerator?

A. Generally one. I know of no one using them that would use more than one gasket. Possibly on a two-door there might be two.

Q. Are there any other patents that you recall as being the subject of licensing by Admiral to anyone else? A. I do not know that.

Q. Do you know whether these licenses to Admiral Corporation from General Electric, Westinghouse and General Motors were also licensed to others in the industry than Admiral?

A. I do not know for certain. I would believe they have been.

Q. The General Motors license, I will point out for the record, was amended January 21, 1948, because of a more favorable clause in the Admiral

(Deposition of Evans T. Morton.)

license, which would indicate there were other licensees.

You have no idea how widespread or liberal that license was of any of these three concerns, have you?

A. It was my impression they were willing to license to anyone. [1026]

Q. Was it your impression that most manufacturers took a license under these, or do you know?

Mr. Byron: I don't believe he would know.

The Witness: I don't believe I am in a position to answer that.

Mr. Byron: Is that all?

Mr. Cuningham: All right; I believe that is all."

The Court: Does that conclude the deposition?

Mr. Byron: No; we wish to offer in evidence the license agreements in which General Motors granted a license to Admiral, General Electric granted a license to Admiral, and Westinghouse granted the license to Admiral, and those——

The Court: Is there any objection?

Mr. Cuningham: I do not see the pertinency of them at the moment.

Mr. Byron: I will explain the pertinency, your Honor. The license agreement from General Motors to Admiral, marked Plaintiff's Exhibit 3-KK, indicates or shows that the royalty rate was 25 cents per refrigerator, and there were at least eight patents involved in that license, a total, a royalty

rate of 25 cents under the eight patents. That is pertinent in connection with the royalty rate.

The Court: I think so, Mr. Byron. The only thing that I was concerned about is, is this the proper time to introduce [1027] those exhibits, or should they be introduced on the defense case in chief? That is the only question I am raising.

Mr. Byron: Yes, and the answer is, your Honor, these are their exhibits. They called for them. Now apparently they do not want them in. We do.

The Court: Were they identified?

Mr. Byron: Yes, they were.

The Court: In the deposition?

Mr. Byron: In the deposition, yes, and in the pre-trial.

The Court: They have elected not to offer them?

Mr. Byron: Yes.

Mr. Cuningham: No, we marked them—he is using our copies.

The Court: Are you offering them, Mr. Cuningham?

Mr. Cuningham: Not at this time, your Honor. I do not think it is proper. I do not think they are relevant.

Mr. Byron: Defendants are offering them.

The Court: They may be admitted. If you do not offer them, the defendants can offer them now.

Mr. Cuningham: I will identify these. The license agreement from General Motors, Frigidaire Division, to Admiral is identified as Plaintiff's Exhibit 3-KK. It is now offered in evidence.

The Court: It may be admitted. [1028]

(Document, License Agreement above referred to, heretofore identified as Plaintiff's Exhibit 3-KK, was received in evidence.)

The Court: Where are they referred to in the deposition? I do not see it. You said they were identified.

Mr. Cuningham: My recollection is, your Honor, that Mr. Byron sent these to me at a later date for the deposition, and we, of course, have had them here right along. They are part of our marked exhibits, but I do not see the pertinency of them.

The Court: Go ahead. I have already ruled on that.

Mr. Byron: The license agreement from Westinghouse Electric Corporation to Admiral Corporation identified as Plaintiff's Exhibit 3-JJ is now offered in evidence.

The Court: It may be admitted.

(Document, License Agreement referred to, heretofore identified as Plaintiff's Exhibit 3-JJ, was received in evidence.)

Mr. Byron: There is the license agreement between Westinghouse Electric Manufacturing Company to the Admiral Corporation identified as Plaintiff's Exhibit 3-II. It is now offered in evidence.

The license agreement from General Electric Company to Admiral Corporation identified as Plaintiff's Exhibit 3-GG is now offered in evidence. [1029]

Mr. Cuningham: If your Honor please, I think those exhibits are incomplete without copies of the patents licensed. We have got no full information, and this is a big picture we are opening the door to here, and I think he ought to include the patents licensed so we can see what they were.

The Court: Mr. Cuningham, that is precisely what I told you yesterday before you asked the hypothetical question about the gasket. I told you that very thing, but you insisted upon asking the question, and I am going to rule the same way for Mr. Byron as I did before.

Mr. Cuningham: Your Honor, my gasket patent was in evidence, but I will stand on the record.

Mr. Byron: The license between General Electric Company dated August 28, 1950, and Admiral Corporation, identified as Plaintiff's Exhibit 3-HH, is now offered in evidence.

The Court: They may be admitted.

(Documents, License Agreements heretofore referred to as Plaintiff's Exhibits 3-GG, 3-II and 3-HH, were thereupon received in evidence.)

The Court: What about the cross-examination? Are you abandoning that, or do you propose to read the questions propounded to the witness?

Mr. Cuningham: There are just a couple of pages of it, [1030] your Honor.

The Court: I am not objecting to it. I am just asking him whether he is going ahead.

Mr. Byron: Yes, we will just take a couple of minutes.

The Court: Then there is some redirect.

Mr. Cuningham: It may be my duty to read the cross, as a rule, as I understand it.

Mr. Byron: I do not understand that.

The Court: These are the questions propounded by Mr. Byron, and Mr. Byron or somebody designated by him will ask those questions, in accordance with our previous understanding.

Mr. Cuningham: They are discovery depositions.

The Court: That is right.

Mr. Cuningham: I have no desire to read them. I am just trying to abide by the rules.

The Court: Go ahead, Mr. Byron.

(Thereupon, the reading of the deposition of Evans T. Morton was continued as follows:)

DEPOSITION OF EVANS T. MORTON

"Cross-Examination

By Mr. Byron:

Q. Near the end of your deposition, the direct examination, Mr. Cuningham read several interrogatories under Rule 33, addressed to the defendant Meier & Frank Co., [1031] Inc., and asked you to answer certain of those interrogatories.

Had you ever seen or heard any of those interrogatories before you testified here today?

A. No.

(Deposition of Evans T. Morton.)

Q. In your direct examination I gained the impression that Admiral Corporation ignored patents of others in the development of its refrigerators. What is the fact?

A. That is not true. What I meant to state was that because of the multiplicity of patents in this industry, something in the neighborhood of I think seventy-five to eighty thousand, it proceeds with the development in the initial stages, ignoring patents, and when development is in a stage where it seems that practical results can be obtained we immediately go to patent counsel for a review of the design to determine whether or not we are in any way involved in patent problems. Is that clear?

Mr. Byron: That is clear, yes. The cross-examination is closed."

"Redirect Examination

By Mr. Cuningham:

Q. I will show you, Mr. Morton, one of several advertisements of the Admiral Corporation, or a photostatic copy of one of those which has been furnished me by Admiral, and which unfortunately did not come with a date." [1032]

Mr. Cuningham: I offer as Plaintiff's Exhibit 3-LL this group of Admiral advertisements furnished by the Defendant Admiral.

Mr. Kolisch: No objection.

The Court: It may be admitted.

(Deposition of Evans T. Morton.)

(Group of photostatic copies of advertisements of Admiral Corporation, previously identified as Plaintiff's Exhibit 3-LL for Identification, were received in evidence.)

Mr. Cuningham: Continuing with the question:

"* * * which unfortunately did not come with a date.

Mr. Byron, that is true of several of these. They missed a little slip at the bottom in the photostatic copy they made, but I trust we can cure that later."

The Court: What difference does that make?

Mr. Cuningham: It explains the condition of the exhibits, your Honor. They have not been corrected.

"* * * at the bottom in the photostatic copy they made, but I trust we can cure that later.

It has as a headline: 'We beteha you never saw such "rave notes"——"

Mr. Byron: "Lead line." [1033]

Mr. Cuningham: I beg your pardon, "lead line: 'We beteha you never saw such "rave notes"——

When a really new invention as utterly different from all other refrigerators as Dual-Temp reaches the public, you naturally wonder: "How's it doing * * * in actual use?" "

What really great invention did Admiral Corporation have in mind?

Was that one of the really great inventions you considered with outside counsel?

(Deposition of Evans T. Morton.)

A. We were granted a patent on both the refrigeration system and the refrigerator cabinet construction for this refrigerant.

Q. Are any of the inventions covered in the patent in that volume of Admiral patents what you would call really great inventions, maybe with the exception of this patent you are licensed under?

A. A really great invention would eliminate probably 99 per cent of the patents. I am speaking of all patents generally.

Q. Including Admiral's?

A. I would say it is not considered a great invention in line with the electric light bulb or the telephone.

Q. Or Armstrongs frequency modulation?

A. It is not that nature of invention.

Q. Then this must have been one of the one per cent. What [1034] one per cent in the refrigeration business can you imagine was meant by this really great invention?

Wasn't it a fact, Mr. Witness, that the Potter two-temperature refrigerating system spurred the interest of Stewart-Warner in this two-temperature refrigerator field? Don't you know that is a fact?"

Mr. Byron: I object to that, your Honor. It has no bearing here, but let him go on.

The Court: Very well.

"A. I can answer the question on the basis that at no time do I recall anyone at Stewart-Warner

(Deposition of Evans T. Morton.)

bringing up any other two-temperature refrigerator in development.

Mr. Cuningham: That is all."

The Court: That closes the deposition.

Ladies and Gentlemen, we did not take our recess at the end of one hour, but I thought we ought to finish this deposition. We will take a short recess.

(Thereupon, the jury retired for the morning recess.)

The Court: What other depositions do you propose to read?

Mr. Cuningham: Sir, I am going to skip through this [1035] thicker volume of Admiral depositions.

The Court: I thought it was agreed that anything that was not pertinent would be deleted in this Morton deposition and these other ones. I see a lot of information concerning former employees of Stewart-Warner that has absolutely no relevance to this case.

Mr. Cuningham: I think it does have, sir.

The Court: Well, you just wait until I instruct the jury and tell them what I think about this Stewart-Warner. I am going to tell them very specifically that Stewart-Warner has nothing to do with this case and that they are to disregard totally any evidence in that regard. We will take a ten-minute recess.

(Thereupon Court and counsel took the morning recess.)

The Court: What deposition do you propose to examine now?

Mr. Cuningham: Your Honor, Mr. Byron and I have been checking them. We are skipping through these thick ones and then starting with the first one which is Siragusa.

The Court: Do you propose to read any other portions, or have you read——

Mr. Byron: Yes, your Honor.

The Court: On Siragusa?

Mr. Cuningham: I will go slow, sir, and announce where [1036] we are skipping.

The Court: Very well.

Mr. Byron: I will start to read on Page 8 of the Siragusa deposition.

Mr. Cuningham: I would start a little ahead of that, if I may.

Mr. Byron: Oh, excuse me.

The Court: Page 8 is the first page.

Mr. Cuningham: The only thing I would like to call attention to, your Honor, is that on Page 2 they are noticed as discovery depositions of the adverse party.

The Court: Yes.

Mr. Cuningham: I was going to start on Page 8.

Mr. Byron: All right.

(Thereupon, the deposition of Ross D. Siragusa was read into the record as follows: With Mr. Cuningham reading the questions and the Court Crier reading the answers.)

DEPOSITION OF ROSS D. SIRAGUSA

"Q. Please state your name, residence and occupation.

A. Ross D. Siragusa, Admiral Corporation, 3800 Cortland Street, Chicago 47, President.

Q. And your residence?

A. Barrington, Illinois.

Q. How long have you been president of Admiral Corporation?

A. Approximately twenty years. [1037]

Q. How long has Admiral Corporation been in existence? A. Approximately twenty years.

Q. Have you been its president throughout its existence?

A. I think so. We might have had a two or three-month period when perhaps a lawyer was president. I don't recall. But for your information, we will mark the record since the inception.

Q. That is entirely satisfactory. What were your connections prior to your becoming president of Admiral?

A. I was president of Transformer Corporation of America. Is that relevant?

Q. It is preliminary.

A. I dispute that. I disagree. Let us start with Admiral Corporation, if you don't mind.

Q. You refuse to answer?

A. No, look, Mr. Cuningham, it isn't a question of refusing to answer. I don't think that is a fair question.

Q. Prior to becoming president of Admiral?

(Deposition of Ross D. Siragusa.)

A. That is right.

Q. And what prior to that? A. School.

Q. What was the business of Transformer Corporation? A. Manufacturing transformers.

Q. How long were you in that association?

A. Oh, approximately eight years.

Q. And then for the last past twenty approximately you [1038] have been president of Admiral, is that correct? A. That is right.

Q. What is the business of Admiral Corporation?

A. Manufacturing and distributing electronic apparatus, refrigerators, ranges, freezers, air conditioners, electric ranges.

Q. That is as of the present time?

A. Well, I believe that was the question you asked.

Q. Yes. I just want to make sure we are talking about the right thing.

Now, what was the business of Admiral Corporation twenty years ago when you became its president? A. Manufacturing radio sets.

Q. Only? A. Only.

Q. Can you tell us briefly for the record the history of the product development of Admiral Corporation?

A. It is in a little book and that is available to you.

Q. I would be very glad to have it. May I have a copy?

(Deposition of Ross D. Siragusa.)

A. Yes. That gives you the thumbnail sketch of the last twenty years."

Mr. Cuningham: If your Honor please, a copy was produced and identified in this case as Plaintiff's Exhibit 3-Z. I offer it in evidence, a little pamphlet. [1039]

Mr. Byron: I object to it because it is not material here at all, but what difference does it make what the history of Admiral is?

The Court: What do you claim for it?

Mr. Cuningham: Well, your Honor, it shows in thumbnail form the history of the Admiral Corporation, including how they got into the refrigeration business, and contains, for example——

The Court: Let me see the book. We have a lot of exhibits here. Go ahead. I will take this under advisement.

"Q. Well, it is common knowledge, I guess, the Admiral Corporation was primarily engaged in the electronic business and particularly in radio and later in the television business?

A. Well, before television, chronologically, I believe, before television we manufactured refrigerators, I believe, and electric ranges.

Q. When did you begin the manufacture of refrigerators?

A. That is a matter of record. I can't give you the exact period.

Q. Well, give me it as exactly as you can by the year.

(Deposition of Ross D. Siragusa.)

A. I can't give it to you even to the year because of the war. I believe it would be around 1945 or 1946. I am guessing.

Q. So it was after World War II?

A. I would say so. [1040]

Q. Then, if I understood you correctly——

A. Television followed that.

Q. Television followed the refrigeration?

A. Yes.

Q. Had you had any contact with the refrigeration business before? A. No.

Q. Or the Admiral Corporation? A. No.

Q. Well, now, you personally had had contact prior to your joining Admiral in the radio business, had you not, or had experience in the radio business?

A. Transformer Corporation of America made transformers and a few radios.

Q. Has the name of Admiral Corporation always been Admiral Corporation?

A. No. It was originally started as the Continental Radio & Television Company back twenty years ago. It changed its name about in—the book will give you that, this little historical background.

Q. Well, I would like your recollection now, if I may.

A. About 1939 or 1940, to the best of my ability. I can't recall the exact year the name was changed to Admiral Corporation.

Q. Can you recall any connection with the Sonora Company? [1041]

(Deposition of Ross D. Siragusa.)

A. We made some radio sets before the war under the Sonora brand. The Sonora Company, I just don't recall whether it was a corporation or whether we just made a brand name set for an individual.

Q. But you personally had no connection with the company by the name of Sonora?

A. No, I personally didn't."

Mr. Cunningham: Now, if your Honor please, I would like to skip to 116, bottom of the page.

The Court: To 116?

Mr. Cunningham: I beg your pardon, to 16, bottom of the page.

"Q. Have you any recollection of who——"

The Court: One second; do you want to read any more (to Mr. Byron)?

Mr. Byron: Not at that point.

Mr. Cunningham: We had cleared, I think, pretty much through this Siragusa deposition.

The Court: Very well.

"Q. Have you any recollection of who is a top officer in Admiral besides yourself? [1042]

A. Yes.

Q. Who? A. John B. Huarisa."

Mr. Byron: Of course, your Honor, I want to make it clear that I think there is a lot of material in here that Mr. Cunningham may read that will have no materiality. It does not make any difference who was vice-president. He was asking those

(Deposition of Ross D. Siragusa.)

questions for discovery so he could go and find out something from those gentlemen, but that eventuated to nothing, and I do not know if it will serve any useful purpose to read those parts. I have no objection to it.

Mr. Cuningham: I have tried to cut them down. I am skipping. There is a relationship with the identification of certain of these individuals that I think is material.

The Court: All right.

"Q. What is his position?

A. Executive Vice-President.

Q. How do you spell it?

A. Let us get the annual report. I think we can save time, Miss Court Reporter, and just include the annual report, and right on the front page is a list of all the officers and their respective [1043] titles.

Would you care to come back to that after you have had a chance to review the annual report?

Q. I think I can go ahead in the absence of that with some questions. A. All right.

Q. By the way, what general divisions product-wise do you have in Admiral Corporation?

A. Well, we have the Electronics Division, which is radio, television and government; and we have the Appliance Division, which includes refrigerators, air conditioners, freezers, ranges, dehumidifiers; and we have several subsidiary companies that manufacture components for these two divisions.

(Deposition of Ross D. Siragusa.)

Q. Can you name some of the subsidiaries that manufacture for the Appliance Division?

A. Molded Products Corporation manufactures I believe some plastics for the Appliance Division. I don't recall any other subsidiary manufacturing for the Appliance Division.

Q. Who makes your cabinets for refrigerators?

A. That is made in the Appliance Division, and the Appliance Division is spelled out in the annual report. It is the Midwest Manufacturing Company. They manufacture the cabinets.

Q. I am afraid I don't understand. Is Midwest——

A. Midwest Manufacturing Company is the subsidiary that manufactures appliances. I described all of the appliances to you. [1044]

Q. And Midwest is a subsidiary?

A. Of Admiral Corporation.

Q. Of Admiral Corporation?

A. That is correct.

Q. Are they located here in Chicago?

A. No. They are in Galesburg, Illinois.

Q. Who heads the Midwest?

A. Mr. Lou Moos, Vice-President of Midwest.

Q. You mentioned Mr. Huarisa.

A. Huarisa, it is right here, sir (indicating).

Q. John B. Huarisa. Is he as Executive Vice-President a top officer over both the divisions?

A. Both. Over all divisions, correct."

Mr. Cunningham: Now I skip to 21, and just for

(Deposition of Ross D. Siragusa.)

the offer, we got the annual report in 1954, and offer that as Plaintiff's Exhibit 3-AA.

Mr. Byron: It is not material.

The Court: That as well as the booklet is rejected on the ground that they have no relevan in this case whatsoever. You may have an excepti to the ruling of the Court.

(Documents previously marked Plaintif Exhibits 3-Z and 3-AA for Identificati rejected.) [1945]

"Q. Now, who is Mr. Edmond I. Eger, al listed here as a vice-president?

A. He is vice-president of advertising.

Q. Where is his office? In this building?

A. In this building.

Q. How long has he been vice-president of a vertising? A. Approximately fifteen mont

Q. Who preceded him in that capacity?

A. Seymour Mintz, not as an officer."

Mr. Cuningham: I will skip now to Page 24:

"Q. You don't sell any refrigerators to t Government? A. No.

Q. Who is Mr. Wallace C. Johnson, also liste as a vice-president?

A. General sales manager.

Q. General sales manager? A. Yes.

Q. That encompasses refrigerators as well a other products? A. Yes, right.

Q. Where is Mr. Johnson's office? In this build ing? A. In this building.

(Deposition of Ross D. Siragusa.)

Q. How long has he been associated with Admiral Corporation?

A. I don't recall. You will have to get it——

Q. Well, can you give me your best recollection, minimum or [1046] maximum number of years?

A. Ten or twelve years.

Q. That is for the past ten or twelve years?

A. Yes."

Mr. Cuningham: Then we jump to Page [1047] 32.

"Q. Mr. George E. Driscoll, secretary and assistant treasurer. A. Offices of the building.

Q. What are his responsibilities?

A. Financial.

Q. How long has he held that position?

A. Well, as secretary, I would say three, four, five years. As assistant treasurer, since the first of the year, since approximately the first of the year.

Q. Does he have under him the accounting?

A. Yes."

Mr. Cuningham: I will skip to 41, bottom of the page.

"Q. Now, Mr. Siragusa—I can't read my own writing—is it Eger? A. Yes, sir.

Q. He is in charge of advertising. Does he have complete advertising records for the past fifteen months, or should he have?

A. You mean copies of advertisements?

Q. Yes. A. I am sure we have.

(Deposition of Ross D. Siragusa.)

Q. And I would like you to confine that to frigeration advertising, household refrigeration.

A. It would be mountainous. You would ha to wait quite a long time to get that informati unless you requested [1048] specific ads. We cou probably pick those up for you rather simply a easily.

You mean national advertising, magazines?

Q. Yes, magazines, yes.

A. You would be satisfied with those?

Q. I think so, yes.

A. Those are very easily, readily available.

Q. I would further like to narrow the requ to the Dual-Temp advertising.

A. Dual-Temp, that is very easily done."

Mr. Cuningham: I will skip the colloquy the

"Q. Now, do you have a research and develo ment laboratory in Admiral? A. Yes, we

Q. Who is in charge of that?

A. Well, we have three divisions. The El tronics Division is headed up by Mr. Rinaldo Cola.

Q. His name is Rinaldo De Cola? That is man, is it?

A. One man. We have another laboratory charge of Mr. Evans Morton at the Midwest Man facturing Company. That has to do with appliance which I stated some time before.

We have a West Coast laboratory which is voted to electronics exclusively, and that is und Mr. Robert Jones.

(Deposition of Ross D. Siragusa.)

Q. So that, as I understand it, and correct me if I am [1049] wrong, the only research laboratory is that headed up by Mr. Evans Morton which concerns itself in any way with refrigeration, is that correct? The others are electronics?

A. That is right.

Q. And as I understand it, his laboratory is over all on appliances? A. That is right.

Q. And appliances includes the items you have named before? A. Yes.

Q. Can you give me some rough idea of the relative importance of refrigeration in this research laboratory as compared to the other appliances?

A. Well, I believe the bulk of the engineering, and it is a rather extensive lab, is devoted to research and development of refrigerator products.

Q. You would say that was the bulk of the work? A. Yes.

Q. Are you speaking as of now?

A. As of a long time back.

Q. How long a time?

A. Since we went out into the refrigerator business.

Q. Ten years?

A. Since we started the refrigerator business.

Q. That is approximately ten years ago, as I understand it? A. I believe so. [1050]

Q. Would you say that was most of the work of this large laboratory research laboratory?

A. Yes.

(Deposition of Ross D. Siragusa.)

Q. Can you give me some idea of the personnel employed in that Midwest research laboratory?

A. I can't tell you the number of people employed in that division.

Q. Either the maximum or minimum?

A. I couldn't do that. I just don't know.

Q. More than ten?

A. Oh, yes, far more than that.

Q. More than fifty?

A. Well, it might be in the neighborhood of fifty or more.

Q. Are they all located in one place?

A. Yes.

Q. What is the address?

A. Galesburg, Illinois.

Q. Do you know the street address, or do we need it? A. No. It is a small town.

Q. Had Mr. Evans Morton, if you know it, had any experience in refrigeration engineering?

A. Yes. He came from Stewart-Warner.

Q. So that he has been with Admiral about ten years, is that correct?

A. Yes, all of that, I would say. [1051]

Q. How long had he been with Stewart-Warner, do you know? A. I can't answer that.

Q. Do you know what his capacity was while he was at Stewart-Warner?

A. Well, he was either chief engineer or assistant to the chief. I don't know which.

Q. Do you know how long he had been associated with Stewart-Warner?

(Deposition of Ross D. Siragusa.)

A. I said I didn't know.

Q. Was he the only research engineer that"——

Mr. Byron: I think I should enter an objection in view of the rulings heretofore given by the Court.

The Court: Mr. Morton has already testified. He has given you all this information. It appears you're interrogating a man who doesn't know these questions.

Mr. Cuningham: But here, your Honor, I am interrogating the President of the Admiral Corporation and who is stating much better than the witness himself can what he thinks of the particular witness, is putting him in his proper perspective for the Court and jury. It isn't the same as if you asked the witness himself what his qualifications were. I think we are entitled to this type of setting. That's the purpose of the exhibit.

The Court: Do you want to show he is incompetent or [1052] competent?

Mr. Cuningham: It shows that he is very competent and that he has a lot of information.

The Court: All right. Go ahead.

Mr. Cuningham: "Q. Was he the only research engineer that came from Stewart-Warner to Admiral at the time of the transfer?

A. I believe, I am not sure, but I believe that several other men came to us from Stewart-Warner when we bought that division. But that information is readily available."

Mr. Cuningham: And then I jump to 51.

(Deposition of Ross D. Siragusa.)

"Q. Max J. Schinke?

A. Yes, he works for us as service manager of Admiral Corporation, all divisions, general service manager.

Q. Did he come over at the time of the transfer in 1945 or 1946, whatever it was?

A. That is right."

Mr. Cuningham: Skip to 52.

"Q. How about Mr. Glenn Muffly?

A. I don't know—yes, I do. I met Mr. Muffly many years ago. He has never been with us.

Q. Has he ever been retained by you as an expert in refrigeration? [1053]

A. He might have been, and I think that is perhaps where I met him. I believe you are right.

Q. Is he currently so retained?

A. I don't know. Is he?"

Mr. Cuningham: Then to 55.

"Q. Now, Mr. Siragusa, you have referred to this"—I may want to strike this. Just a minute—or omit it, I mean. I think I shall omit it and go to 59.

Your Honor, I had planned to read from the middle of page 59 to the colloquy at the end of 65. I am wondering, in view of your Honor's ruling, whether I should do so. As far as I can see it's all relevant and I don't want to appear to violate any ruling.

Mr. Byron: Of course, my thought is it's not relevant.

(Deposition of Ross D. Siragusa.)

Mr. Cuningham: Well, certainly—how far did I say?

Mr. Byron: 59 to 65.

Mr. Cuningham: I think certainly on 63 it is relevant.

The Court: On 63 it is what?

Mr. Cuningham: Relevant, it seems to me, sir. In fact, I have no question about that. I would be glad to proceed unless you think I should not. Middle of 63.

The Court: You mean you are going to start at the middle of 63?

Mr. Cuningham: No. I would like to start, if your Honor [1054] has no objection——

The Court: Well, Mr. Cuningham, throughout the day you have been trying to tie in Stewart-Warner with this case in spite of my repeated admonition that Stewart-Warner has no connection with this case.

Mr. Cuningham: Well, your Honor——

The Court: You have listed time and again members of the—in the deposition of officers who came from Stewart-Warner, and then when I ask you the relevancy you wanted to note a characterization, and then when the statement came in that this was the time of transfer you dropped the examination.

Mr. Cuningham, I think that you ought to stop doing that and abide by the rulings of the Court.

Mr. Cuningham: Well, your Honor——

The Court: Ladies and gentlemen of the jury,

(Deposition of Ross D. Siragusa.)

I am going to tell you right now that Stewart-Warner has nothing to do with this case. The Admiral people bought some assets from Stewart-Warner and they are not bound by anything that Stewart-Warner did. If you buy a store unless you specifically agree to be bound by the engagements of the former owner, you are not bound by it. And by the same token Admiral is not bound merely because it bought some of the assets, including some of the patents.

Now, I instruct you that as a matter of law.

Mr. Cuningham: I am—— [1055]

The Court: The motion is—you may have an exception to my remark and you are not to read the portions you suggested.

Mr. Cuningham: That's beginning on 59 and going over, your Honor—I am merely reminding you of this, the statement by Mr. Cuningham on page 63.

The Court: Well, pass this one for the time being and we will come back to it. I want to read it more carefully.

Mr. Cuningham: I will jump, then, your Honor, to page 89, and I would like to look at it before we start reading it.

Well, your Honor, I must admit your ruling is tough. Of course, these depositions were taken before. There is a reference there. My plan was to read from 89 to 91, through 91 and over to the top of 92.

(Deposition of Ross D. Siragusa.)

The Court: Well, I think it's clearly inadmissible.

Mr. Cuningham: We will not read it. Then I intended to go to 95, and again I don't know without looking at it—I guess that's all right, sir.

Mr. Byron: Well, I have the sequence as 95, beginning about six lines down, "Can you tell me which type of refrigerator has shown you in the past your highest and best profit, and by type I mean of the two general types, the conventional or dry cold as distinguished from the Dual-Temp, as between those two categories of boxes?" Then the answer. [1056]

Mr. Cuningham: I think that was a question by me.

Mr. Byron: "A. Mr. Cuningham, is that relevant? I can answer it.

Q. I think it is quite relevant.

The Witness: Is it relevant, Mr. Byron?"

Mr. Byron: Well, do you want that colloquy?

Mr. Cuningham: Yes, I think we ought to have it.

Mr. Byron: "Well, it is one of those borderline questions. I will put in an objection that it is not relevant.

Mr. Baltz: It may be that you don't want to answer it.

Mr. Cuningham: I don't want the figures. I just want which is the best profit opportunity.

The Witness: If counsel says to answer it, I will be glad to answer that question.

(Deposition of Ross D. Siragusa.)

Mr. Byron: Yes, answer it.

A. Conventional boxes. May I tell you why?

Q. (By Mr. Cuningham): I was just about to ask you why?

A. Many times the number of units.

Q. That are sold? A. Oh, many times.

Q. Is the profit ratio per unit greater on the conventional or on the Dual-Temp?

A. On a weighted average basis, it would be higher on the conventional.

Q. I am afraid I don't understand what you mean by weighted [1057] average basis.

A. Yes, weighted average means if we have nine conventional boxes in a line, seven and eight and nine or ten or eleven, of various types, such as stripped, standard, de luxe, you weigh the average for the year, you take a profit factor, and that is a weighted percentage, and that is higher than the Dual-Temp or two-temperature. We call that the Dual-Temp or two-temperature. I tried to qualify the meaning of the word Dual-Temp in that answer.

Q. Which type, conventional or Dual-Temp, was sold in greatest dollar volume by Admiral over the past ten years? A. The conventional.

Q. In dollar volume? A. Sure.

Q. With respect to your plugging or promoting of these two types, on which do you spend the most money in advertising? A. The two-temp.

Q. You have consistently sold both types right along, have you not?

(Deposition of Ross D. Siragusa.)

A. Yes, but by far the conventional, by far in number of units or dollars, the conventional, by far.

Q. And as I understood your testimony, in profit per unit?

A. By far, weighted average and total dollars, conventional.

Q. How about without the weighted average? How about just the profit per unit, is that more or less? [1058] A. In dollars?

Q. Yes, in dollars.

A. Well, you see, you will have to make the question more specific. We make a seven, an eight, a nine, a ten and eleven foot standard refrigerator. Well, we make them up to twelve cubic feet in size. Which one are you referring to, the Dual-Temp box and what, a seven foot? Obviously, the Dual-Temp would have a higher profit factor. But if you get into an eleven foot deluxe conventional, we have more profit in an eleven foot deluxe than we would in a Dual-Temp. Our margin of profit is very small in the Dual-Temp.

I know it creates a frown on your face, if I make that statement.

Mr. Cuningham: I am sorry if I frowned.

The Witness: No, but it is true.

Q. (By Mr. Cuningham): Can you give me any idea in dollars and cents how great the difference is?

A. No, I can't. That would have to be studied

(Deposition of Ross D. Siragusa.)

and after—strike this from the record. This is off the record.

Mr. Cuningham: All right.

(Whereupon, a discussion was had off the record, after which the following proceedings were had herein:)

The Witness: I will not disclose that information. You will have to get a court order for our profit structure on [1059] our various products, not only—on appliances, but radio and television also. I will not disclose that information. I have tried to give you to the best of my ability a rough idea of what the profit structure would be on both types of the units.

Q. (By Mr. Cuningham): Mr. Siragusa, I have before me a 1950 copy of Air conditioning-Refrigeration News, dated July 1, 1950, the second page of which lists the usual information as to the products of Admiral. Apparently in that year you sold only two Dual-Temp models, namely, model Nos. 1090 and 1390. At least that is all that is reported here. Is that correct?

A. I remember those model numbers. Those would be described as ten and thirteen feet respectively.

Q. They are so described here. The 1390 is 13.5 cubic feet? A. That is right.

Q. And the 1090 is 10.6. Now, there seems to be nothing that precisely corresponds among the other eight models, which are all of the conventional

(Deposition of Ross D. Siragusa.)

type. Is that a representative list of your refrigerators sold at that time?

A. For four or five years, I would say, we had an average of two Dual-Temps in the line and possibly as many as twelve, thirteen, fourteen conventionals. The past several years, perhaps two or three years, we have had an average of one to one and a half Dual-Temps in the line and fourteen, fifteen, [1060] sixteen conventionals. That is why the preponderance of sales and profits is in the conventional and not in the Dual-Temp.

Q. Well, tell me if you think you are not qualified to answer this. I want to be very fair about it. But how does that stack up with the experience of other refrigerator manufacturers, such as Frigidaire, General Electric? They don't use your trade name.

A. As far as two-temperature boxes are concerned?

Q. Yes, moist-cold boxes.

A. Well, I really can't answer that. I don't know what my competitors do.

Q. Do you attempt to keep abreast of your competitors?

A. I do, insofar as specifications and prices and styling are concerned, but not a breakdown of models. I obviously couldn't get that.

Q. But do you attempt to keep abreast of the two general types of refrigeration, that is, the conventional and the moist-cold, I shall call it, to avoid using your trade-mark 'Dual-Temp'?

(Deposition of Ross D. Siragusa.)

A. Yes, we try to keep abreast of our competition, Mr. Cuningham.

Q. There are those two general types, are there not, in the refrigeration industry?

A. Yes. They are called either moist-cold or two-temperature or freezer chest and moist-cold combination, yes. [1061]

Q. As distinguished from conventional?

A. From conventional.

Q. Which is the dry.

A. And they in turn are distinguished—there are several in that category, the U-shaped evaporator box, the wide evaporator, and so forth.

Q. But there are those two broad categories of household refrigerators, are there not, say the dry cold versus moist cold?

A. Yes, I would say so.

Q. And those are generally accepted terms in the industry? A. Right.

Q. Has that been true ever since your knowledge and activity here at Admiral for the last ten years in the refrigeration business?

A. I believe that that has. I believe Frigidaire has had a moist-cold refrigerator for about as many as we have. I think they have. I don't know about the others."

Mr. Cuningham: I would like to skip to 109 and read it, your Honor. I plan——

The Court: I think this is a good time for a recess and then you can go through the balance of

(Deposition of Ross D. Siragusa.)

your interrogation and delete the offensive portions.

Ladies and gentlemen, we will take a recess [1062] until 1:45.

(Whereupon, at 12:05 o'clock p.m., a recess was taken until 1:45 o'clock p.m.) [1063]

Afternoon Session

(At 1:45 o'clock p.m. the trial herein was resumed, pursuant to recess, and further proceedings herein were had as follows.)

The Court: Which deposition were we reading?

Mr. Cuningham: If your Honor please, I think I have a better idea of the scope of your Honor's ruling, so we have cut down this materially. The next spot that I wish to start with in Siragusa is the latter part of Page 112. Mr. Byron may have something before that.

Mr. Byron: I have just a question and answer on Page 111.

The Court: Very well.

Mr. Byron: Mr. Cuningham asked the question. Perhaps you would like to ask it.

Mr. Cuningham: Do you want me to ask it.

Mr. Byron: You can.

"Mr. Cuningham: Q. Have you discussed the so-called Potter patent reissue in suit with any other refrigeration manufacturer?

A. I have not."

Mr. Cuningham: Then at the bottom of Page 112

(Deposition of Ross D. Siragusa.)

"Q. Have you had any experience in reading and interpreting [1064] patents?

A. No use in showing it to me because I couldn't read a diagram from an architectural drawing.

Q. Who would be best qualified in the Admiral organization to give us such assistance?

A. I would imagine Mr. Morton would."

Mr. Cunningham: Then, if your Honor please, I would like to go to Page 134.

Mr. Byron: I would like to go to 132; cross-examination.

The Court: 132?

Mr. Byron: Correct.

The Court: All right; go ahead.

Mr. Byron: Cross-examination.

Cross-Examination

"Q. Mr. Siragusa, I would like to clear up one point with respect to patents owned or controlled by others than the Admiral Corporation. Do you respect patents owned or controlled by others than Admiral Corporation? A. Most certainly.

Q. And if you thought that you infringed any patent, you would either attempt to purchase it or secure a license under it? A. Yes, sir. [1065]

Q. State your general policy with respect to patents, and the policy that Admiral Corporation has with respect to them.

A. As I testified before, we have RCA, licensor, Hazeltine, and we may have some others in the appli-

(Deposition of Ross D. Siragusa.)

ance field, and in the electronics field as well.

If we feel that we are violating a patent or on the verge of it, we will attempt to take out a license. Failing in that, of course, we drop it or achieve a particular electronic objective — I speak of electronics, I mean I talk more about electronics because I am closer to that field—and we may design around it. But we first try to take out a license under the particular patent."

Mr. Byron: That is all.

Mr. Cuningham: On redirect examination:

Redirect Examination

"Q. What licenses do you have in the refrigeration field?

A. I don't recall, Mr. Cuningham, but that I think our counsel or Mr. Baltz can give you. You might have to give him a day or two and then pick it up. They will get the information from Midwest, our subsidiary.

Q. You mentioned as examples of your respect for adversely held patents the Radio Corporation of America and Hazeltine Corporation. Is it not a fact that you brought a declaratory [1066] judgment suit against the Radio Corporation of America to declare invalid each of its 10,000 patents in the District of Delaware a few years ago?"

Mr. Byron: I think that is quite immaterial. I have no objection to it seriously.

(Deposition of Ross D. Siragusa.)

Mr. Cuningham: If your Honor please, it was opened on cross.

The Court: Well, isn't that the place a person should go to find out what his rights are, in court?

Mr. Cuningham: Well, I did not have in mind the particular court: the fact that he brought the suit against the 10,000 patents.

The Court: All right; you may answer.

"A. I believe we did. I believe we did.

Q. And I believe you backed down and settled the case, did you not? A. Yes.

Q. You set up some antitrust defenses, as I recall it? A. Yes, I think so.

Q. Is that an example of your respect and cooperation on other——"

The Court: Do not answer that question. [1067]

"Q. Did you respect the Armstrong patents in the electronic field? A. No——"

Mr. Byron. I think that is immaterial.

The Court: The jury is instructed to disregard all the testimony concerning the declaratory judgment suit. We are not trying any other case except the one involved here.

Mr. Cuningham: If your Honor please, I suppose that ruling extends to the next question and answer, but the one after that I should like to read.

The Court: What question is it?

Mr. Cuningham: Page 136; one, two, three from the top, third question.

(Deposition of Ross D. Siragusa.)

The Court: "What reserves——" Is that it?

Mr. Cuningham: That is correct.

The Court: Objection sustained. You cannot read that.

Mr. Cuningham: And the same applies to the answer to that?

The Court: That is right. It has no relevancy whatsoever.

Mr. Cuningham: If your Honor please, I will skip for the time being, without waiving my right to read this at another time in the case, the Bailey and the Rengel [1068] depositions.

The Court: Siragusa has been closed?

Mr. Cuningham: Yes. I would like to go to——

The Court: I do not understand. What is Bailey and Rengel?

Mr. Cuningham: I am omitting those for the moment. I do not expect to read them in our case in chief.

Mr. Byron: It seems to me that if they are going to be read at all they should be read now.

The Court: Before he closes his case, however; if you close your case you cannot read any more depositions unless it is for the purpose of rebuttal.

Mr. Cuningham: I should like to go to the deposition of Mr. Driscoll beginning on Page 2?2:

DEPOSITION OF GEORGE E. DRISCOLL

"Q. Give your name and address and years of employment with Admiral.

A. My name is George E. Driscoll, 6920 North Medford, Chicago. I have been employed here since 1936.

Q. Title?

A. I am the secretary and assistant treasurer.

Q. Can you tell us what the practice of the Admiral Corporation is with respect to——"

Mr. Cuningham: I beg your pardon; that is not what I [1069] wanted it for, sir. I did not spot that. I want to skip now, after identifying him, to Page 204.

"Q. Now, in the year 1950, Admiral manufactured about ten different types of refrigerators, is that right?

A. No, we didn't make any refrigerators in 1950.

Q. 1950? A. No, sir.

Q. Well, your subsidiary, Midwest, made ten different types and Admiral sold them, is that right?

A. No, they wouldn't have made ten even in 1950; no.

Q. Well, give us the facts such as they are.

A. In 1950 refrigerators were made by Seeger Manufacturing Company in St. Paul, Minnesota, and the American Central Division of the Abco Corporation in Connersville, Indiana, and perhaps late, very later in the year 1950—I would have to check

(Deposition of George E. Driscoll.)

this—Midwest, a subsidiary of Admiral, began manufacturing refrigerators.

Q. So until late 1950 all of Admiral's production came from outside, of refrigerators?

A. Yes. I am a little hazy whether it is 1950 or 1951 when we bought Midwest. We bought it on March 31st, but I don't recall whether it is 1950 or 1951."

Mr. Byron: I do not see, your Honor, any materiality. [1070] The fact is, who made them for Admiral, Admiral sold them anyhow. We were not in a position to manufacture them at that time. We had them manufacture them, and we sold them.

Mr. Cuningham: Your Honor, I hesitate to characterize it as an important defense, but when the Admiral Company got into the business is material in this case, as I think your Honor well knows, of the special defenses set up by the defendants, and, by the way, I would like to show you some exhibits we have on that.

The Court: I am going to let it in. Go ahead.

"Q. Was Midwest one of your suppliers at that time? A. No, sir.

Q. Did the Seeger and Abco companies build the refrigerators that were marketed by Admiral pursuant to Admiral specifications, drawings and requirements? A. That is correct.

Q. And did Admiral have personnel who engineered and supervised the construction of refrigerators sold under the Admiral name?

(Deposition of George E. Driscoll.)

A. That is correct."

Mr. Cuningham: Unless Mr. Byron has something, I think that is all of the Driscoll deposition.

Mr. Byron: I think not. [1071]

Mr. Cuningham: Then I would like to read the deposition of Mr. Johnson, except for colloquy, in its entirety, beginning on Page 214 and with other exceptions, if I notice them, to come under your Honor's ruling.

The Court: Very well.

(Thereupon the deposition of Wallace C. Johnson, a witness called in behalf of Plaintiff, was read into the record, with Mr. Cuningham reading the questions and the Court Crier reading the answers as follows:)

DEPOSITION OF WALLACE C. JOHNSON.

"Q. Mr. Johnson, state your name.

A. Wallace C. Johnson.

Q. Where do you reside?

A. 6752 North LaPorte, Lincolnwood.

Q. What is your occupation?

A. Vice-president in charge of sales.

Q. How long have you held that position?

A. As vice-president?

Q. Yes. A. About seven years.

Q. I have been reading this little sketch of the company which gives me some information about you. I got the impression from it that you arrived in the early 1940's, is that right?

(Deposition of Wallace C. Johnson.)

A. That is right.

Q. In what capacity did you first join Admiral?

A. As regional manager.

Q. In what year?

A. That was in September of 1944.

Q. What were your responsibilities at that time when you joined?

A. I covered some twenty states.

Q. In all products? A. In all products.

Q. That did not, then, of course, include refrigeration, did it? A. About ten years.

Q. 1930 to 1940? A. Yes.

Q. Handling their radios and electronic products? A. Yes. I was a regional man.

Q. Not refrigerators? A. No appliances.

Q. This booklet says, and it is correct, is it not, that you are now vice-president in advertising, it says? A. No.

Q. I am incorrect. That is Mr. Seymour Mintz, and he is no longer with the company?

A. That is right. [1073]

Q. Are you familiar with this little booklet which is marked Siragusa Exhibit 1? A. Yes."

Mr. Byron: That has been excluded.

Mr. Cuningham: Your Honor has excluded that.

The Court: Yes. Go to the top of Page 222: "Were you familiar in 1939——"

Mr. Cuningham: Are you excluding Page 219, sir, at the bottom?

The Court: Yes.

(Deposition of Wallace C. Johnson.)

Mr. Cuningham: Going, then, through 220, 222?

The Court: I thought you were on 221.

Mr. Cuningham: If your Honor wants me to read it, I will. I did not plan to read it.

The Court: Which one?

Mr. Cuningham: 222.

The Court: I do not care what you read except that there are some things you are not going to read. Where do you want to go?

Mr. Cuningham: Let me get the place here.

The Court: I thought that when the booklet was mentioned you were on 221.

Mr. Cuningham: I was on 217.

The Court: 217? I do not care about that. You can [1074] read anything you want on Pages 217, 218, 219 and 220.

Mr. Cuningham: Perhaps we can skip some of it. The bottom of Page 219:

"Q. I think it is correct to say, is it not, that you were the top executive in 1944 with refrigeration experience?

A. No, I couldn't say that."

Mr. Cuningham: Strike it.

Now I understood your Honor does not want me to read on 222 and 223.

The Court: Well, you can read: "Were you familiar in 1939 to 1940——"

Mr. Cuningham: What page, sir?

The Court: 222.

Mr. Cuningham: "Q. Were you familiar in

(Deposition of Wallace C. Johnson.)

1944 or earlier with the Stewart-Warner Dual-Temp? A. No.

Q. Were you familiar in 1939 to 1940, when you were selling the Gibson refrigerator, with the other competitive refrigerators on the market?

A. No, I was not, because I was not directly responsible for the refrigerator end of the business. I was concerned with RCA and its many products.

Q. Well, did you just happen to know of any combination [1075] freezer on the market in 1939?

A. No, I did not know of combination freezers of Stewart-Warner at that time. [1076]

Q. Or of any other manufacturer?

A. Or of any other manufacturer, not in 1939.

Q. When did you first know of a combination freezer-refrigerator?

A. When I came with Admiral, as the line developed."

Mr. Cuningham: I will skip the next sentence. Well, this is all a quotation from that booklet. We will skip that.

The Court: All right.

Mr. Cuningham: I would like to start in at the top of page 224, second question.

The Court: All right.

Mr. Cuningham: Maybe I had better start at the first question.

The Court: Go ahead.

Mr. Cuningham: "Q. Well, in any event, as far as your experience goes, was the Dual-Temp of Stewart-Warner the first such combination?

(Deposition of Wallace C. Johnson.)

A. The first that I knew about.

Q. Was it the first to feature moist-cold or humidity control in the fresh food compartment?

A. I wouldn't know that.

Q. You don't know of any earlier one, do you?

A. No. I just recall that Frigidaire had something like [1077] that, a cold wall. But that is all I do recall.

Q. You think they were earlier?

A. I don't really know."

Mr. Cunningham: Well, if your Honor please, I see no objection, even if it is a quotation, to starting in the middle of page 225.

The Court: Neither do I except I don't see the relevancy. But I am going to let you go ahead.

Mr. Cunningham: "Q. Now, continuing with this booklet, and I quote from page 12:

'The next step was to build up the Admiral trade name and at the same time develop a strong sales organization. This burden fell largely upon the shoulders of W. C. Johnson and Seymour Mintz.'

Can you tell us briefly, and limit your answer with respect to the refrigeration, what your main pitch was in selling refrigerators when you began to sell them after the war? What was your general sales argument that you and your organization used?

I will limit it to the Dual-Temp.

A. What our pitch was at that time with regard to Dual-Temp was that foods don't dry out and that foods don't transfer odors.

(Deposition of Wallace C. Johnson.)

Q. And that was because of the moist-cold compartment? [1078]

A. Well, that was because of two things, moist-cold compartment, and also the sterilamp. The sterilamp had to do directly with the transfer of odors.

Q. It had nothing to do with the humidity?

A. It had nothing to do with the humidity, but you would have transfer of odors if you didn't have the sterilamp, regardless of the humidity.

Q. Mr. Johnson, did you continue to use that same pitch throughout with respect to the Dual-Temp? A. Pretty near, yes."

The Court: Don't you want to read on 227, -8, or -9?

Mr. Cuningham: It does rather summarize the ads but I didn't want to——

The Court: Go ahead. You select the portions.

Mr. Cuningham: Well, I would be glad to read it.

The Court: I don't care if you read it or not.

Mr. Byron: It doesn't seem to me to make much difference. If you are in business to sell things you have got to advertise. That's about all there is to that.

Mr. Cuningham: Well, I think it might be some help to the jury and isn't long. I guess we will continue on 226 at the bottom.

"Q. As indicated, I think, by certain ads that I won't bother you about, that have been furnished me, unless you want to [1079] see them.

(Deposition of Wallace C. Johnson.)

A. No. That is about right.

Q. The ads I refer to are those attached to the Admiral interrogatories.

Now, what other sales helps, beside newspaper and magazine advertising, did you use to work up this refrigeration business?

A. We had sales meetings. We held dealer meetings across the nation. We used radio at that time to start with, and then as we progressed we went into TV.

Q. Did you get out any printed booklets such as these, exemplified by these that I show you, and I hand you Admiral interrogatory exhibits B through F, I believe."

Mr. Cuningham: Those have been previously identified.

The Crier: "A. Yes, these are service manuals.

Q. Those were sent to the distributors?

A. Sent to the distributor's service department and they in turn more than likely mailed some to the servicing companies that were handling the Dual-Temp.

Q. What was your system of distribution? Through jobbers and dealers?

A. Yes, the first step being through distributors, and they in turn sold to dealers.

Q. This little booklet characterizes the present-day organization—and by the way, I found a date in here of June 30, [1080] 1953, on page 1, so that it was probably printed since that time—characterizes

(Deposition of Wallace C. Johnson.)

the present organization as having 88 distributors and 32,000 retail dealers. Is that about the status at the present time? A. What was that 88?

Q. 88 distributors.

A. That is about right, 86. I think that is a little high on the dealers.

Q. Well, that is a nationwide organization?

A. That is a nationwide organization. That includes people that have bought one refrigerator or one TV or one radio.

Q. Probably a little too much, to be conservative, is that it? A. Yes.

Q. Did you furnish these distributors and dealers with any other printed sales helps than these service manuals?

A. I imagine so. I couldn't tell you exactly.

Q. I don't want to be too——

A. No, I imagine we had other material.

Q. Can you give me some generally used other item that you think of now?

A. There were specification sheets, your line folders.

Q. Well, I show you a 1956 publication marked Siragusa Exhibit 7."

Mr. Byron: Now, your Honor, that's far beyond the [1081] day when this patent expired, 1953, so it's immaterial.

Mr. Cuningham: I withdraw it.

Jumping to page 232, middle of the page:

"Q. But did you have frosting in the moist-cold job?

(Deposition of Wallace C. Johnson.)

A. No, we did not have frosting with the previous job, but actually there isn't too much frosting on this job."

Mr. Byron: I think that is referring to an experimental job and it started long after 1953; as a matter of fact, in 1955.

The Court: Is that right, Mr. Cuningham?

Mr. Cuningham: I didn't so understand it when I read it. There is a previous job and I marked it when I read it. Well——

The Court: What is the exhibit?

Mr. Cuningham: That was a later one excluded earlier this morning, your Honor.

The Court: Well, isn't that what you are talking about?

Mr. Cuningham: No. This is the previous one, as I understood it.

The Court: No. 7?

Mr. Cuningham: No, previous refrigerator, previous job.

The Court: Oh.

Mr. Byron: Now, you are speaking about your Exhibit 6, whatever that is, 6 and 7. Now, what is 6? [1082]

Mr. Cuningham: That is also excluded, but that is from——

The Court: Well, it's in already. Let's go ahead.

Mr. Cuningham: I would like to read from the middle—to the middle of page 234.

Mr. Byron: Well, that gets into the booklet. What he is trying to do here is to read pieces of that little booklet that has been excluded, read them piece by piece into the record. That's been——

Mr. Cuningham: No, your Honor.

The Court: What page?

Mr. Cuningham: Page 234, sir, and over to page 235 is really what we get to. I will exclude that booklet part. It's just the beginning is all.

The Court: You mean the question on 235?

Mr. Cuningham: I would like to read, I think, the whole page. I think I ought to start, it seems to me, on 234, in the middle, and read through 235.

The Court: Well, you don't have to do it. These jurors know that the Admiral Company is a big corporation, and that's all you are trying to bring out.

Mr. Cuningham: All right, sir. If your Honor rules against it, of course—may I have the figures on 235?

The Court: No.

Mr. Cuningham: The percentage figures, middle of the [1083] page, 5 per cent of the total billing?

The Court: For the advertising costs?

Mr. Cuningham: Yes, normal advertising. Five per cent of total billing.

The Court: Well, what possible relevancy does the fact that Admiral Company spends 5 per cent of their total billing on advertising have on any issue in this case, Mr. Cuningham?

Mr. Cuningham: Your Honor, it seems to me it

has a relevancy on the—fixing of a reasonable royalty.

The Court: Do you think there is a correlation between payment of royalties and advertising costs?

Mr. Cuningham: Some. I agree it could be remote, but I think some.

The Court: Well, I can't see any, and so the objection to this line of examination is sustained.

Mr. Cuningham: Your Honor has sustained it?

The Court: Yes. I think if there is anything here as to what they get for the machine, I think that's important and you may bring it out, because the only testimony that has come out is the retail price. But Mr. Parker says that it was a reasonable royalty based upon what the company received and not the retail price, so if you want to bring out what the wholesale or manufacturer's price is, you may.

Mr. Cuningham: Well, your Honor——

The Court: The price from the manufacturer to the [1084] wholesaler, that you can bring out.

Mr. Cuningham: Your Honor, that has been in the case in the first day in the answers to the interrogatories.

The Court: Oh. All right. I know that, of course, would be all right. I didn't know that that was in evidence.

Mr. Cuningham: One thing that must go in here—I think I spotted it here—I haven't been able to find it. Your Honor, I seem to have lost it.

The Court: All right. You can bring it up a little later.

Mr. Cuningham: We will have to skip this thing. I have not been able to read the thing straight through and I cannot put my finger on the statement. Of course, it's a bit difficult because there is so much repetition in these things to skip.

The Court: You can close this deposition and come back to it later.

Mr. Cuningham: Well, sir, the only other one is the Eger one, and I am pretty sure that the point that I had in mind was in the Johnson deposition. Maybe Mr. Byron would cure my lapse and read it.

Mr. Byron: I don't know what your lapse is, but I'd be glad to help you if I knew, but I don't know what your lapse is.

Mr. Cuningham: Do you have anything you want to read in Johnson? [1085]

Mr. Byron: Not a bit.

Mr. Cuningham: I remember what it was, but I can't find it. Well, sir, I would like to——

The Court: You will reserve the right to complete Johnson?

Mr. Cuningham: All right. Thank you. I guess we will go over to the last one—or not the last one. I have no desire to read Sheridan. He merely identifies the booklet. But Eger, I think, is a short one, and that is on page 243.

The Court: Go ahead. [1086]

(Thereupon the deposition of Edmond I. Eger, a witness produced in behalf of Plaintiff, was read into the record, with Mr. Cuningham reading the questions and the Court Crier reading the answers, as follows:)

DEPOSITION OF EDMOND I. EGER

"Q. Will you state your name, Mr. Eger?

A. Edmond Eger.

Q. Where do you live?

A. Flossmoor, Illinois.

Q. What is your business?

A. I am advertising director for Admiral Corporation.

Q. How long have you held that position?

A. Since March 1st of last year.

Q. What was your business prior to March 1st of last year?

A. I was in the advertising agency business.

Q. In connection with Admiral? A. Yes.

Q. What agency?

A. Russell M. Seeds Company, and prior to that, my own agency, Cruttenden & Eger.

Q. Can you give me a rough idea of the period of time you have covered now? Give me the dates.

A. Well, Cruttenden & Eger, from about 1922 to about 1951. Then Russell Seeds, I have to figure it out. If it is a year prior to March 1st of last year, from 1953 to 1954. [1087]

Q. There is a gap there, Mr. Eger?

A. No, there shouldn't be, because I went right from Cruttenden to Russell M. Seeds. I was with Seeds for about a year.

Q. You are probably a little early when you left Cruttenden & Eger. You said 1951. You tell me. I don't know.

(Deposition of Edmond I. Eger.)

A. I would have to check it up if you want the exact date.

Q. There was no gap in your connection?

A. No gap, no. [1088]

Q. Did you have any experience in the electric appliance field in either of these two companies, advertising agencies? A. Yes.

Q. What, briefly?

A. Well, we handled the Admiral account from, oh, about 1936 on.

Q. In both Cruttenden & Eger and Russell Seeds? A. That is correct.

Q. That is, were they successive handler of the Admiral account?

A. Yes. When I went over to Russell Seeds I brought the Admiral account with me."

Mr. Byron: I frankly do not see——

Mr. Cuningham: I want to skip the rest of that page. I think we have got Siragusa Exhibit 1 on Page 246. We will skip that and go to Page 249, bottom of the page:

"A. Our budget for this year——"

Mr. Cuningham: Oh, I am reading your answer, I guess.

The Court: Well, it seems to me that that is nothing material. I have read down to Page 253, and I cannot find one question or one answer that has any relevancy to this case.

Mr. Cuningham: All right, sir; let us start on Page [1089] 253 at the top:

(Deposition of Edmond I. Eger.)

"Q. Well, now, if you can throw your mind back to the first contact with Admiral's appliance Division, which was roughly in 1945 and ended probably in 1948, can you recall what your principal pitch was on the Dual-Temp in the advertising? By that I mean, did you advertise the moist-cold feature principally or were there other features that you stressed equally?

A. Well, there were other features that we advertised, but the moist-cold compartment was the main feature that we stressed.

Q. And that was true throughout that two- or three-year period, was it not?

A. I believe so, yes.

Q. I am willing to make that answer subject to correction if we get the advertising books down here and look through them.

A. Well, I remember we had a lot of ads that had a heading on them, 'No Defrosting.'

Q. That was a feature, too?

A. That was a feature, and that was the so-called principal feature. I also remember that we, if you want to call it, sub-featured the freezer compartment, the sterilamp.

Q. I am familiar with enough of your advertising that I [1090] think I know that, and we have samples here. I would like for you to glance quickly through Admiral interrogatory Exhibits I through N and tell me if you recognize those and if they refresh your recollection as to these features, or if you want to amend your testimony.

(Deposition of Edmond I. Eger.)

A. No, I think my memory was very good.

Q. I do, too, sir. Is there anything you would like to add as the result of your looking through that?

A. No. This merely confirms my observation here that all of these ads were prepared by Tatum-Laird. I had no responsibility for those.

This one (indicating) I remember because of the words 'No Defrosting.'

Q. Referring by 'this one' to Interrogatory Exhibit I.

You would accept that as a representative group of the advertising, as you know it, for the Dual-Temp refrigerator?

A. For the Dual-Temp refrigerator, yes."

Mr. Cuningham: Does your Honor's ruling extend to the next page?

The Court: Yes.

Mr. Cuningham: I believe that concludes Eger, and I did not intend to put anything in on Mr. Sheridan. I think I could find that if I took time. [1091]

The Court: What about Bailey and Rengel? Do you want now to read Bailey and Rengel?

Mr. Cuningham: No, sir.

The Court: Then you are waiving Bailey and Rengel except insofar as it may become relevant in your rebuttal; is that right?

Mr. Cuningham: I think so, sir, or possibly if there is any occasion to use it on their case for

impeachment purposes or cross-examination. I understood that we could use this type of deposition for any purpose in the case.

The Court: Are Bailey and Rengel in the courtroom?

Mr. Cuningham: Well, perhaps we ought to identify them. I forgot.

Mr. Byron: I can tell you exactly who they are. Bailey is a man in the patent department of Admiral who at one time prepared patent office drawings and later developed into making preliminary drafts of patent applications and does some amendment work under a superior.

The Court: I do not care about that. Are they here in the courtroom?

Mr. Byron: No, no; just routine.

The Court: Is Rengel in the courtroom?

Mr. Byron: Oh, no.

Mr. Cuningham: They were both patent people, patent lawyers. [1092]

Mr. Byron: There is nothing in there that is pertinent to this case.

The Court: Well, the deposition of a person cannot be used to impeach anyone else except the person who gave the deposition. Mr. Cuningham.

Mr. Cuningham: Your Honor, if the deposition established facts contrary to what the testimony is——

The Court: I do not want to argue with you on that now. You are not going to read either Bailey or Rengel?

Mr. Cuningham: Not now, sir.

The Court: Very well. Do you have any other testimony at this time?

Mr. Cuningham: No, but we have some exhibits to offer. The first one that I see are ones that Mr. Kolisch and Mr. Maguire, I believe, discussed. Unfortunately, Mr. Maguire is trying a case and cannot be here, and he has indicated the ones that he understands Mr. Kolisch agreed to; and I believe one or two others that Mr. Kolisch did not agree to that he wanted to offer. Now, I can leaf through those.

The Court: First, I want you to find the testimony that you think is relevant on Johnson. There is no use of keeping a jury here while you identify documents for an hour or two, and therefore what we are going to do is to take whatever testimony you have, and then we will excuse the jury until next week unless you want to go on today. [1093] Mr. Byron.

Mr. Byron: I would just like to mention this, your Honor, that Mr. Cuningham worked on us a long, long time to get in a Steele deposition, and finally we said that we would agree to stipulate that if he were called as a witness he would testify as follows: Question and answer form.

Now, we have done that. Mr. Cuningham wanted him in badly. Now we want him in, too.

Mr. Cuningham: No, your Honor, my understanding and my recollection has been greatly refreshed by reading the transcript of the pretrial proceedings for November 7th, and I am unwilling to take the risk, and I do not think it is worthwhile,

of any error in this case by offering the deposition of the deceased Mr. Steele. My attitude has changed completely since our record has been made. I do not think we need his testimony on dates, so I decline to offer it, and I object to it being offered by the other side.

Mr. Ramsey: We have a stipulation on that.

Mr. Cuningham: We had no such stipulation that I was aware of. I was offered a bargain and did not take it.

Mr. Byron: Mr. Cuningham begged for it——

Mr. Cuningham: That is true; I thought if I were to use it, but I have declined the stipulation.

The Court: Mr. Cuningham, you called my attention to [1094] that, that there were no other offers connected with the offer to introduce Steele, and I took issue with you at the time. Then it developed that downstairs, outside my presence, a stipulation was entered into.

Mr. Cuningham: I do not deny that, sir.

The Court: And then Mr. Ramsey called up, and he said that your recollection was correct and that the testimony of Steele could be admitted regardless of any other deposition.

Mr. Cuningham: I do not deny that, sir, but the point I am trying to make—I may not be too clear about it—is that I did not accept a thing, and I would not accept it until I had offered it. I do not need it now, and I do not think we want it in the record. That was a unilateral thing, and it was all tied up with the depositions of Andersen and

Bonning. I do not want any of them now. I think our record is complete.

The Court: Mr. Byron, in the absence of a written stipulation, which worked both ways, the objection of Mr. Cunningham will be sustained because a stipulation apparently was made outside my presence, and I do not know the full reach of it. Mr. Cuningham says that it only permitted him to introduce it, and I am willing to accept that.

Now, Mr. Cuningham, will you take a look and see which part of Johnson that you want. [1095]

Mr. Cuningham: I will, sir.

The Court: And then we shall excuse the jury.

Mr. Cuningham: I think I have it, sir.

The Court: What page?

Mr. Cuningham: It begins at the bottom of Page 237 and runs over a little beyond the middle of Page 238. I think it is probably not covered by your ruling. The pertinency, your Honor, is the connection with the hypothetical question.

The Court: Down to the bottom of the page?

Mr. Cuningham: About the middle, a little below the middle of 238.

The Court: Go ahead.

(Thereupon excerpts were read from the deposition of Wallace Johnson as follows, with Mr. Cuningham putting the questions and the Court Crier the answers.)

DEPOSITION OF WALLACE JOHNSON

"Q. Have you ever, and by you I mean Admiral Corporation, ever used the pitch to your dealers and distributors that the Dual-Temp is a high-profit item, higher than the conventional type for them?

A. That would be true because of the higher list prices. There are more unit dollars involved.

Q. They make more unit profit? [1096]

A. Well, sometimes they make more unit profit, but sometimes they give it away in trade-ins.

Q. If they didn't give it away, they should make more unit profit, is that right?

A. That is right."

Mr. Cuningham: That is all, if your Honor please, subject, of course, to these offers and, as I understand, to our session making the record on Friday.

The Court: The plaintiff rests except for the introduction of exhibits and the offer of proof that plaintiff desires to make.

Mr. Cuningham: May I ask one question about that? I would prefer, I think, to say that we rest after we make our offer of proof because it is possible that there might be some hangover from that. That is my only reservation, your Honor.

The Court: The thing I want to know is whether there is any useful purpose keeping the jury here this afternoon.

Mr. Cuningham: I agree, your Honor, wholeheartedly, and we have these very few exhibits. They would not probably have much chance to read them anyhow.

(Discussion off the record.)

The Court: Ladies and gentlemen of the jury, as you probably know, we are shy courtrooms in this building. We [1097] have four judges and two an a half courtrooms, and so I am going to have to give up this courtroom for a little while on Monday morning. In order to make it unnecessary for you to stay around here when some other judge is hearing a matter, I am going to excuse you until 11:00 o'clock on Monday morning, and I think that will be sufficient time for Judge McCulloch to dispose of those matters.

You have only heard one part of the case, the plaintiff's case, and you have not read some of the exhibits that plaintiff will offer, and likewise, as it has become quite apparent to you by now, there is some evidence which I regard as immaterial in this case, which I shall summarize for you in my instructions; therefore, I want to admonish you once again before this long vacation, please do not make up your mind on this case, and you have quite a bit of time between now and next Monday, so do not talk about it with anyone else. In the arguments of counsel the salient features of this evidence will be reviewed for you. Have a happy Thanksgiving, and you are now excused until next Monday morning at 11:00 o'clock.

(Whereupon the jury retired from the courtroom at 2:55 o'clock p.m.) [1098]

(The following proceedings were had out of the presence of the jury:)

The Court: All right. Now, go ahead, Mr. Cuningham. Mr. Kolisch, why don't you stand by him and see if we can't get the record complete?

Mr. Cuningham: Well, maybe we can speed things up a little bit because I have the original exhibits here that I will reach after we finish with Kobernuss, and if you could let somebody else besides Mr. Kolisch examine them——

The Court: No. Let one man do it. Do both sides waive any requirement that the exhibits be introduced in the presence of the jury?

Mr. Byron: I will waive that.

Mr. Ramsey: Yes.

Mr. Cuningham: Yes.

The Court: Both sides have waived?

Mr. Cuningham: Yes, your Honor.

(Discussion between counsel.)

The Court: I think that rather than try to complete the record now on the exhibits that it might be well for you men to get together and then offer them on Friday morning at 10:00 o'clock.

Mr. Cuningham: All right, sir.

The Court: It is apparent now that you are not fully prepared. [1099]

Mr. Cuningham: My difficulty is that Mr. Maguire did it and I am trying to pinch-hit for him and I don't really know, I guess.

The Court: All right. You can complete the record on Friday, at which time I will hear your motions at the same time.

Mr. Cuningham: Thank you. Well, we might

save time if we look at these. We are going to offer them Friday.

The Court: All right. You can use the courtroom.

Recess until Friday at 10:00 o'clock.

(Whereupon, at 3:00 o'clock p.m. an adjournment was taken until Friday, November 25, 1955, at 10:00 o'clock a.m.) [1100]

Friday, November 25, 1955, 10:00 A.M.

the trial herein was resumed, pursuant to adjournment, and further proceedings were had as follows:

The Court: As I understood our position last Wednesday, we were to come back today in order to permit you, Mr. Cuningham, to make a record.

Mr. Cuningham: Yes, sir; and first, you know, to complete our offer of exhibits as to which we agreed.

The Court: Have you and Mr. Kolisch gotten together on that?

Mr. Cuningham: With about three exceptions, your Honor, we have. Suppose I offer them now. There is no other business. The ones I will offer first there is no dispute about.

The Court: Just give the numbers.

Mr. Cuningham: I wish Mr. Kolisch would keep a weather-eye on me. I do not want to slip on this.

(Discussion off the record.)

Mr. Cuningham: I offer in evidence Plaintiff's Exhibit 6-XX, Plaintiff's Exhibit 6-UU, Plaintiff's

Exhibit 6-Y, Plaintiff's Exhibit 6-X, Plaintiff's Exhibit 6-W, Plaintiff's Exhibit 6-T, Plaintiff's Exhibit 6-U, Plaintiff's Exhibit 6-V.

The Court: Are those the only exhibits that you are offering on which there is no dispute? [1101]

Mr. Cuningham: No, sir.

(Discussion off the record.)

Mr. Cuningham: Your Honor, we have agreed upon portions of Exhibits 6-Z, 6-AA and 6-DD. Those are pages taken from those exhibits.

The Court: Are there any objections to other portions of the documents?

Mr. Cuningham: We have agreed upon eliminating the other portions, your Honor.

The Court: All right. Offer them and then submit them.

Mr. Cuningham: May I offer these simply as pages from those three exhibits?

The Court: Do you have now copies of the pages which you are to substitute in lieu of the original exhibit?

Mr. Cuningham: My own feeling is, your Honor, it would be clearer if we identified the pages. They were not marked, you see, page by page. These were bound in one group and given an exhibit number.

The Court: Go ahead.

Mr. Cuningham: I am sorry, I do not know how to do it, to be clear about it.

The Court: May I suggest that you now go to the controversial matter and came back—you do

not need me for the exhibits that will be admitted without controversy. [1102]

Mr. Cuningham: Your Honor, we do need you because I am postponing just a minute until I get the proof in those exhibits as to which there is objection and upon which your Honor will pass upon.

The Court: That is precisely what I said. Let us go to those.

Mr. Cuningham: There is just one more. May I take a moment?

The Court: All right.

Mr. Cuningham: Your Honor, from Exhibit 6-DD, and there is no objection to any of these, we offer six pages which are identifiable, I believe, by simply the last two words that are on each, and I quote: "Essential Features," "Standard Cycle," "Proven Mechanism," "Five Working Parts," "Dependable Power Plant," and "Adjustable Controls."

And from the same exhibit, if your Honor please, we offer the following similarly identifiable pages, being six in number, and I quote: "Celery and Olives," "Fresh Foods," "Cooked Foods," "Hydrator Pans," "Air Conditioning," "Equipment and Craftsmanship"—those being also from Exhibit 6-DD.

From 6-AA we offer five pages identifiable by the little corner printing in the upper right-hand corner of each page: "Food Preservation by Ice Refrigeration," "Food Preservation by Dry Cold

Mechanical Refrigeration," [1103] "Efficiency of Dry Cold Refrigeration Process," "The Answer to Proper Food Refrigeration Is Air Conditioning," and "Here Is Evidence of Difference in Results."

Also, if your Honor please, we offer from Plaintiff's Exhibit 6-C Pages 2359 through 2372, inclusive, except the opening paragraph on Page 2359 which is X'd out, being the license to the Standard Refrigerator Corporation, and Plaintiff's Exhibit 209 in the Stewart-Warner case.

We also offer again from Plaintiff's Exhibit 6-C Pages 2373 through 2384, being Plaintiff's Exhibit 210 in the Stewart-Warner case, that being in printed form, your Honor. We have here the typewritten form of, I believe, the same license which is to Apex Electrical Manufacturing Company and has heretofore been marked Exhibit 6-AAA.

We offer, and also identify herein as Exhibit 6-BBB-1, -2 and -3, three letters with return receipts as to which there is no dispute. Now, if your Honor please——

Mr. Kolisch: Just a moment, Mr. Cuningham. With respect to the portions of the Exhibit 6-C which Mr. Cuningham has submitted, I want to make clear that those are portions from the Stewart-Warner record which Mr. Cuningham has cut out. They relate to certain license agreements to which we have no objection; however, we are not admitting the admissibility of 6-C generally. This is just the license agreements which you have cut out of 6-C. [1104]

Mr. Cuningham: That is my understanding. You are entirely correct.

The Court: All right.

Mr. Cuningham: I think there is—I omitted one paper to which there is no objection.

Mr. Kolisch: No objection.

Mr. Cuningham: Also, we offer 6-C. Now, if your Honor please, I offer 6-YY and 20 as to which there is objection. I offer it without further explanation.

The Court: What are they?

Mr. Cuningham: Do you want me to say, sir?

The Court: Yes.

Mr. Cuningham: The first one, 6-YY, is self-explanatory. It is headed "Potter Refrigerator Corporation Sales of Refrigerators Embodying the Potter-Bronaugh Patent No. 2,056,165 and Potter Patent 2,258,959," a three-page exhibit which shows the model numbers, which distinguishes the type of refrigerator and number sold and the amounts received. It is offered and admitted; that is, the authenticity is admitted in this case already. It is offered as proof of sales by the plaintiff's direct predecessor without any licensee or any mention here of direct sales, and I see no reason why it should not be admitted.

Mr. Kolisch: The objection to that, your Honor, is that this bears, it has to do with Bronaugh-Potter Patent [1105] 2,056,165 which is the original, and another patent, 2,258,959. These are sales. We do not know what has to do with the original Potter

patent and this other Potter patent. This is all intermingled.

The Court: There were two patents?

Mr. Kolisch: There were two patents.

The Court: In the Stewart-Warner case actually there were three patents.

Mr. Kolisch: There were three.

The Court: Now, do I understand that when the patents were surrendered there was only one patent surrendered for this reissue patent?

Mr. Kolisch: Yes, the 2,056,165 which reissued.

Mr. Cuningham: If your Honor please, as I said in my description, these are identifiable and distinguishable, the patents that are involved in each type of refrigerator reported on that list, and it is covered by the Potter deposition already in record.

The Court: I am going to admit it.

Mr. Cuningham: If your Honor please, I offer Exhibit 20. That is a prospectus of the Admiral Corporation. I quote from Page 19.

The Court: A prospectus?

Mr. Cuningham: Yes.

"Refrigeration Patent Corporation and [1106] Potter Refrigerator Corporation, holders of certain patents referring to electric refrigerators known as the 'Potter patents,' have filed suits in the District Court of the United States for the Northern District of Illinois against Stewart-Warner Corporation, claiming that equipment manufactured and sold by said Corporation, the patents, patent applications, licenses, tools, jigs and dies relating

to which the Company has contracted to acquire from said Corporation, infringe said Potter patents. The Company is not a party to these suits, which are now on trial. In the contract between the Company and Stewart-Warner Corporation, the latter has agreed to indemnify the Company against any loss from infringement of the Potter patents prior to October 24, 1944. In the opinion of the Company the outcome of the Potter litigation should not materially and adversely affect its prospective business in the electric refrigerator field."

The date of the prospectus is November 15, 1944. The contracts, as your Honor will recall, with the option are already in evidence in this case, and I see no reason why this should not be admitted. [1107]

The Court: The offer will be rejected. Objection sustained.

(The offered exhibit and previously referred to was thereupon rejected.) [1108]

The Court: Now, I might say that with reference to the statement I made to the jury which I will repeat in my instructions, to the effect that nothing that transpired in the Stewart-Warner case affects any issue in this case except the fact that the Court of Appeals held the patent invalid, and that was the basis for the issuance of the reissue patent—I make that statement not only because of the testimony introduced in the trial, but also because of the representations that were made to me in connection with the pretrial, at which both parties submitted argument and evidence and ex-

hibits. And looking toward the admissibility of certain testimony from the Stewart-Warner case, I make this statement now in order to complete the record.

Mr. Cuningham: I would like to ask Mr. Kolisch who he represents?

Mr. Kolisch: I think that's a question of record, your Honor.

Mr. Cuningham: You represent both Admiral and Amana?

Mr. Kolisch: Do you want me to answer this interrogation?

The Court: This is kind of a strange request when here he is appearing on behalf of Admiral and Amana. I don't think that there is any dispute about that. He is a partner of Elmer Ramsey and Elmer Ramsey has come in and said that he represents both parties.

Mr. Cuningham: I know that, sir. You will recall [1109] that Mr. Kolisch wasn't with us, unfortunately, at the beginning of the lawsuit, and I just wanted to be sure. Perhaps he would have no serious objection to clearing up this matter now on the record. I want to be sure what parties or party he represents and I want to know what parties or party he feels responsible to, I want to know what party or parties he gets authority from to act in the case, and I want to know by which party or parties he was selected to appear in the case.

The Court: Well, what difference would all that make, Mr. Cuningham?

Mr. Cuningham: I think it will be apparent, your Honor, after my questions are asked.

The Court: Well, you asked the questions. When a man appears in this court on behalf of certain clients, he has authority to bind them.

Mr. Cuningham: And that means that all these questions are answered in the affirmative, that he is responsible to both parties?

The Court: That's right.

Mr. Cuningham: I would also like to know who he is paid by, Admiral or Amana.

The Court: Well, I am not going to have him answer this question. By what right do you ask these questions, Mr. Cuningham? [1110]

Mr. Cuningham: I ask the amount of payment. I want, your Honor, simply to know who represents who.

The Court: Well, what is the purpose of the inquiry?

Mr. Cuningham: It will become apparent, your Honor.

The Court: Well, answer the question.

Mr. Cuningham: The purpose is, your Honor, to show that the Admiral corporation has—well, perhaps I can do it extemporaneously a little better.

Your Honor will recall that from the very beginning when we filed the complaint we prayed for treble damages because of the wilful character and deliberate character of the infringement of the Admiral Corporation. That was repeated in the supplemental and amended complaint and made with greater specificity during the pretrial confer-

ence at one of the later ones. Therefore, if your Honor please, under that issue, which I think is an issue for the Court—and I am taking this opportunity because the jury is not here—under that issue this ceases to be just the normal run of the mill patent suit.

I am not sure that I have made that point clear. I don't think I have really had an opportunity to because I didn't appreciate the necessity for doing so until your Honor made some rulings in the trial.

Now, of course, I know, I think, as well as anyone else, that intent is ordinarily not a part of the skin and [1111] bone patent suit. That, however, is not true here, and I think that what we have already in the record goes quite far and maybe it's complete enough with respect to the malicious, wilful, and deliberate infringement by Admiral not only its own infringement but under the new statute, and aiding and abetting of others, which is now an active infringement under the statute, the contributory infringement; also, if your Honor please, under the theory of joint tort feasors in connection with, at least, the defendants that are before your Honor, if not others.

Finally, if your Honor please—and I do not propose to ask at this time that your Honor permit me to amend to the complaint to conform to the pleadings—but my friends on the other side have had notice of all this. I don't think your Honor has. They had since April when we took the Chicago depositions shown in the record.

I would like, I think, for your Honor to realize

that there is not only these two joint tort feasorships and contributory infringement doctrine but also the further now well recognized tort of malicious interference with the business of another.

Now, of course, the others in this case is plaintiff and plaintiff's predecessor in title. The case of Green against the Munson Line, which I don't have handy here, but which is a New York case, but which has been written up [1112] in the A.L. Journal and other periodicals which I think are available here, is most interesting in exposition of that theory—not to old theory, but pretty well established now—of the action ability of the notion of interference with the business of another.

The Court: Is all this related to whether Mr. Kolisch is getting paid by the Admiral and Amana Corporation, or whether——

Mr. Cuningham: That isn't quite the way I stated it.

The Court: Well, let's stop the conversation. Mr. Kolisch, are you getting paid by Amana and Admiral both, or don't you know?

Mr. Kolisch: I don't know, to tell you the truth, your Honor. I was retained in this case through Mr. Ramsey.

The Court: How about that, Mr. Ramsey?

Mr. Ramsey: As a matter of fact, I have been paying Pierre to help me.

Mr. Cuningham: Well, then, I had better ask Mr. Ramsey, I guess.

The Court: Are you getting paid by both Admiral and Amana?

Mr. Ramsey: That's correct.

Mr. Cuningham: To whom are you responsible, both of them?

Mr. Ramsey: Both of them, I guess [1113]

Mr. Cuningham: Who selected your office?

Mr. Ramsey: I don't know.

Mr. Cuningham: Well, how did you come to get the case?

Mr. Ramsey: Why, he asked me to.

Mr. Cuningham: Who?

Mr. Ramsey: I really don't know which one asked me. I think originally Lou Johnson did. They were the ones in here and I have represented him, I know that, prior, and frankly——

Mr. Cuningham: Well, if your Honor please, this business of defending others—and also in connection with what will be my first offer, simply because it was last rejected—a little booklet, "The Admiral Story" is quite enlightening.

The Court: Well, no speeches, Mr. Cuningham. I am sick of those. You just tell me your offers and I will pass upon them.

Mr. Cuningham: Well, I would like to have an order, if your Honor please, that I get this information—not the amount of the bills or anything, but I would like to get full information from Messrs. Ramsey and Kolisch as to how they came to be in the case and how they divide their responsibilities, if they do. I think that's a very important part of these three causes of action.

The Court: Well, I don't. I think you have got enough information and I am not going to give you

any more orders. [1114] I think that they have fully and frankly stated their position.

Now, Mr. Ramsey has stated that he is responsible to both of them, he doesn't recall who gave him the case. I don't think that that is important anyway.

Mr. Cuningham: Now, of course, it's only one part, your Honor, because a great deal of the evidence, as I recall it—and it will become quite specific, I think, as we go through it—bears upon this matter which, as I said, is for the Court.

The Court: Well, then, we will take it up after the end of this case if it becomes necessary.

Mr. Cuningham: Well, if your Honor please, we want to make our record now, make our offers of proof, and in the event—it's my understanding that this was to be a pretty much final thing and we would close our case on Monday subject to this and whatever developed out of it.

The Court: Well, I segregated that issue as to the question of treble damages. That's not in the case. That's not the question that is going before the jury.

Mr. Cuningham: As I said, I admit that is a question for the Court, but how about questions of contributory and joint infringement all alleged since the beginning, and how about the wilfulness and so on as it might affect the findings of the jury?

The Court: Well, is there an issue of wilfulness before [1115] the jury?

Mr. Cuningham: Well, there is certainly an issue

of infringement. I suppose it might be characterized an issue of wilful infringement.

Mr. Kolisch: It makes no difference as far as the jury is concerned. It's the business of the Court as to treble damages, and I think Mr. Cuningham is forgetting that first he has got to prove he has got a valid patent infringed and he has done everything to avoid that. I think we ought to keep to the issues.

The Court: Make your offer. Mr. Cuningham, I am not going to put that book before the jury and I have seen what you have tried to do in this case and I don't like it. You've read the names of people who have foreign names in order to prejudice the jury against a person because he has a foreign name, and I don't like that stuff, and that's not the way I am going to conduct a case, and that's not the American way of doing it, and I have seen you do it and you are not going to do it any more.

I am going to call it to the attention of the jury, what you have done, and I think it's just disgraceful. Siragusa and these other names, the only thing you asked them, what their position was and you are going to tie it up, and after the names—these four names came out—you dropped it.

Mr. Cuningham: Well, if your Honor please, I am very [1116] sorry if you feel that way. I certainly had no such intention and I didn't mean to cast any aspersions on his name. That is his name.

The Court: That's right. And those and the other people had Greek names too, and in this court

Greek people have a right the same as everybody else has rights.

Mr. Cuningham: Evans T. Morton and those. I——

The Court: I have seen other names too.

Mr. Cuningham: Well, all I can say is I am very sorry your Honor feels that way. I have certainly not tried to do anything with those names.

Well, your Honor feels satisfied that you don't want the particular point of this booklet, Siragusa Exhibit 1, which was marked, I guess, for this case as Exhibit 3-Z, pointed out to your Honor at this time just briefly?

The Court: No. I am satisfied that the exhibit is not admissible in evidence.

Mr. Cuningham: Well, without quoting from it, your Honor, may I say this: It makes the statement in a certain form—it's been repeated in many other exhibits—that—and it's a statement by Admiral that Stewart-Warner was first with a moist cold type of refrigerator. Now, it's perfectly obvious when they bought this business from Stewart-Warner that they knew all about the suit, they bought the business. [1117]

The Court: Mr. Cuningham, I have already told you I am not going to admit it. You have made your offer and the offer is rejected.

Mr. Cuningham: Well, just for that reason, sir, as one example of how they falsely and deliberately claimed to be first when they weren't——

The next exhibit I offer for this purpose for the record is Exhibit 3-II and it's related Exhibit

3-JJJ. 3-II is a picture of the present type of modern refrigerator that the plaintiff is interested in and -JJJ is a copy of the Potter design Patent 155,033 under which plaintiff expects and hopes to get into the business.

The Court: I have already passed upon those two exhibits, I believe, and held them to be inadmissible and the offer is rejected.

Mr. Cuningham: Yes, your Honor. That's true of all these, you see. I am making this record.

The Court: Well, how many times are you going to have to make a record on exhibits that I have already rejected?

Mr. Cuningham: Well, perhaps your Honor is right. Maybe I misunderstood this proceeding. I thought that we had to have it complete in the event of any interlocutory action in the Court of Appeals or other things. I didn't know.

The Court: Well, I think that once I reject an exhibit [1118] you have preserved your record. You can, if I am in error in that and you lose the case, that's the basis for appeal.

Mr. Cuningham: Yes, your Honor. I thought we ought to do it now before the trial closes in the event there is any need of a further action.

Now, I offer Plaintiff's Exhibit 6-B. It's from Plaintiff's Exhibit 6-B, page 2534 which, your Honor, is merely a diagrammatical showing of the Stewart-Warner device. I would like to have that to show how much more close is the defendants' device in this case. That's the purpose of it.

The Court: Well, I don't think I have to rule

on that again. I have already ruled that it's inadmissible.

Mr. Cunningham: Your Honor is ruling now, sir, that's why. Now, this is the last two, I guess. For this purpose I offer Exhibit 3-HHH, and I shall not characterize it because I have no idea that your Honor will admit it. It shows the Stewart-Warner records. I might say I did have hope that you might reconsider if you saw what was in some of these things.

I also offer——

Mr. Kolisch: I would like to point out for the record that the Court has seen these. These have all been submitted before, Mr. Cunningham.

Mr. Cunningham: I think you are right, Mr. Kolisch. [1119]

I offer Exhibits 3-FFF-1, -2, -3, -4, as evidence of the impact of the Potter refrigerator on the market.

The Court: All right. All the offers are rejected.

Mr. Cunningham: Now, sir, I have also to offer and make, I think for the first time, of record here excluded portions of the depositions of Potter, Bonning, Quinn. There may be—in fact, I think there is some Siragusa, I am not certain about Johnson. I think we got most of that in. Those can be identified in your Honor's absence, if you wish.

The Court: Yes, that's perfectly all right. You can read them into the record.

Mr. Cunningham: Yes.

The Court: But I am satisfied that the portions excluded were either irrelevant or objectionable for

one of a variety of reasons which I mentioned at the time of the exclusion, so I don't see any useful purpose of my remaining here. I thought that you had intended to bring down a live witness from Seattle to make a record on.

Mr. Cuningham: Oh. If your Honor please, maybe—and thank you for your reminding me of that—that was Mr. McChesney and I had forgotten when I was talking. I can do that right now, I believe. That is, not produce the live witness but make the record. [1120]

Mr. Cuningham: Of course, this is on an entirely different theory, and it is not the theory that I tried to explain to your Honor which, in our judgment, means that the Admiral Corporation should pick up the tab for the industry, not just Amana, but we have certain difficulties of proof, and for that reason we are not amending the complaint to enter this theory of joint tort-feasors, contributory infringement, and malicious interference with the business of another. This is an entirely different thing, your Honor. On Page 175 of the record while Mr. McChesney was on the stand your Honor remarked, "We are here to try to find out whether Amana and Admiral infringed the claims of the reissue patent." I continued the examination of Mr. McChesney and was cut short by your Honor's ruling.

The Court: Mr. Cuningham, why don't you make your offer of proof?

Mr. Cuningham: My purpose was to have him testify to an infringement of the nature, and his

testimony would have been in words and substance in accordance with this letter from Mr. McChesney which I shall now read, or a portion of which I shall now read. I am just reading the last paragraph of it. It is a one-page, four-paragraph letter.

"My wife used to say that our Potter [1121] was the last thing in the house she would part with until she could get one like it. I don't remember exactly when we bought the Potter, but it was around 1932, and we used it until the condensation got inside the wooden cabinet and the wood rotted out. This was in 1950. We moved the Potter to the basement and replaced it with an Admiral Dual-Temp which gives essentially the same service as the Potter did. If we had not been able to get a refrigerator of this kind, I would have rebuilt the Potter box rather than go back to the dry-cold type of box."

This was not, as we patent lawyers state, element-by-element proof of infringement. It was, however, it seems to me, perfectly admissible at the time proof of the Dual-Temp Admiral box performing all the functions in the house of Mr. McChesney.

The Court: Perhaps Mrs. McChesney should be a witness here.

Mr. Cuningham: I can get him down on Monday to give that testimony.

The Court: You can get him down here, but he is not going to testify as to that or anything like it. The offer of proof is rejected. Go ahead with your offer of proof.

(Thereupon there was discussion between counsel off the record.) [1122]

(Thereupon, counsel for plaintiff designated the following excerpts from the following depositions as part of their offer of proof in the case:)

DEPOSITION OF THOMAS IRVING POTTER
October 25, 1955

"Q. Now to shorten this a little, have you any correction with respect or any disagreement with the statement of the author made on those three pages describing the refrigerator?

A. All is correct, except the last sentence in his article. That is, 'The main point of difference as noted before is the use of the double expansion valve.' He made an error there. He should have said, 'the double expanders'—that is what he should have said, because we did not use double expansion valves. It was just a slip in his writing. I think it is self-evident."

"A. Winter Hull was using a Potter box in his home, and he was terrifically enthused over it. Several times when I was at the factory, he said that he would like to interest other manufacturers. At that time he told me that they were building a large number of boxes for Stewart-Warner, that then he thought he would like the opportunity of interesting [1123] them——"

"A. (Continued): Mr. Winter Hull came to

(Deposition of Thomas Irving Potter.)

my office and brought Mr. D'Olive with him, and they both stated they were there for the purpose of negotiating for a license under my patents for the Stewart-Warner Company.

That was the purpose. I think that is a fact. That was the purpose and they stated it, and I so noted. I entered into negotiations through Mr. O'Olive with the Stewart-Warner Company. Mr. D'Olive led me to believe that they were definitely interested and sincere in their desire to take out a license——"

"Q. Mr. Potter, I show you what I believe to be——

Mr. Byron: Why don't you just show him something and ask him what it is? It doesn't make any difference what you believe it to be. You are not testifying.

Q. ——a credit memorandum of Potter Refrigerator Corporation dated September 21, 1935, attached to which is an invoice of Stewart-Warner Corporation, dated August 8, 1935.

Also, I show you a letter dated August 14, 1935, from Charles R. D'Olive to F. J. Bommer, Jr., from Potter Refrigerator Corporation, and a letter dated August 15, 1935, from Rex Manufacturing Company, Inc., to Potter Refrigeration Corporation. Do you identify those as documents produced [1124] from your regular files?

A. These documents came from my files and evidenced the return from Stewart-Warner of the

(Deposition of Thomas Irving Potter.)

two sample boxes which we had submitted to them for their examination. These boxes embodied our invention.

Q. So those boxes submitted in the course of these negotiations with Stewart-Warner, were they?

A. Yes, while the negotiations with Stewart-Warner were going on, for their examination. They were sent to Chicago and they were given full instruction on their operation and construction, and so forth.

Mr. Cuningham: I offer those four documents and ask that they be clipped together and be given the next exhibit number."

"Q. Very briefly, Mr. Potter, what was the result of these negotiations?

A. As briefly as I can put it, if I leave out the reasons why the negotiations were dropped, the negotiations were dropped. Can I be more brief?

Mr. Cuningham: No, sir, I don't think you can be more brief.

Q. Was this dropping prior to the advent on the market of any moist cold refrigerator by Stewart-Warner?

A. That was prior to their bringing out what they called [1125] their Dual-Temp box.

Q. Did or did not Mr. Bommer have any part in these negotiations?

A. Mr. Bommer was very active in those negotiations. He made several trips to Chicago. He went over our equipment in their laboratory with

(Deposition of Thomas Irving Potter.)

their engineers, explained its operation, explained the necessity of having proper balance in the combination.

Q. At that time the application for the original of the patent in suit was pending, was it not?

A. That was pending, sir.

Q. Did Stewart-Warner or any representative of it ever request access to your pending application for that patent?

A. They insisted that we show them our private papers covering the pending application. I refused to give them access to that. I told them if they were sincere in their negotiations that I would protect them on this basis, that when the patent issued, if it did not properly cover the invention, they could cancel the license for contract that they had taken out on the pending patent, and that therefore they did not need to see our private papers. I told them at that time that I did not propose to show them the private papers of our application so that they might possibly have inside information and decide to dump us overboard and then go ahead on their own to our detriment. [1126]

Q. Did anyone state to you or give you or any member of the Stewart-Warner Corporation an impression that that was a partial reason for the discontinuance of the negotiations?

A. They made a definite statement as their out, that unless we disclosed our private papers on the pending application that Stewart-Warner would not go ahead with the deal."

(Deposition of Thomas Irving Potter.)

"Q. Do you remember any negotiations with Mr. Cord?

A. Yes. Somebody—I don't remember his name—came to my office in Buffalo in the year of 1935, and stated he represented the E. L. Cord Company, and that they felt that they would like to make a deal with us to take over the Potter Refrigerator Company, and consolidate that with one of their subsidiary companies. I have forgotten the details of the deal that they offered, but at that time they seemed quite interesting to me. We sent a Potter Refrigerator to their office in Chicago. They operated it there. They checked it and had their engineers check it. They became very enthused over the possibility.

They stated that this would fit it perfectly with the subsidiary corporation production that they had, that they could supply us with a setup that would get us going on a national basis instead of the small scale on which we were operating.

Q. Was that your desire at that time? [1127]

A. That was very much our desire, because we were handicapped for lack of capital. That was the only thing that ever held us back. And I remember very well, indeed, because of the little touch of drama in it—again I can't remember names—but the Vice-President of the E. L. Cord Company made a trip to Buffalo. He landed there almost at midnight and asked me to come down and meet him to discuss this so that we could consolidate the deal. We discussed it. We came to an agreement

(Deposition of Thomas Irving Potter.)

on it, and I thought that we were set, and I had visions of the Potter being pushed on a national basis with ample capital.

A few days after that, I believe on a telephone conversation from Chicago—I can't remember whether it was a wire or telephone or what—but I know that we were notified from Chicago that they would have to hold up negotiations because of the Cord Company was in trouble with the Government on their financing. E. L. Cord at that time, I believe, had a controlling interest in one of the big airlines. And they asked me to hold up our negotiations until that was straightened out.

Q. When was this, Mr. Potter?

A. This was, I believe, in 1935. Cord did not get his matter straightened out, so the matter was dropped."

"Q. Now, Mr. Potter, will you go ahead chronologically and [1128] tell us what happened next with your business in household refrigerators?

A. We covered them, pushing on our dealer setup, our sales, and so forth, through 1935 and '36. At this moment, maybe there was something occurred, but I don't remember of any particular thing of significance during that period.

Q. What is the next thing of significance that you recall?

A. The next very vital thing in significance was that in the spring of 1937, late in the spring, the Rex Company, without any warning, notified us that they could no longer furnish us with boxes.

(Deposition of Thomas Irving Potter.)

That was disastrous, because in this refrigeration business your main sales to dealers, your commitments, are always lined up from, say the first of January on through March and April, and when we were notified that Rex could not supply us that just absolutely chopped us off. There were a few boxes left from the last year, a very few.

Q. So what did you do, Mr. Potter?

A. Then when we were chopped off of that, I told Mr. Bommer that he would have to find a new source of supply. He made a number of calls on different cabinet manufacturers, discussed the matter, and he found the Sanitary Refrigerator Company of Fond du Lac, Wisconsin, and they stated that they would be interested in picking up production.

We made a deal with them to cover production. We had the tools and dies which we owned that were at the Rex [1129] Company. We had those shipped to Sanitary Refrigerator Company in Fond du Lac. They started in to line up production. But each manufacturing company has its own methods on their production line. So Sanitary, to keep it in line with their methods of production, redesigned the box and many of the tools we sent them wouldn't fit their presses, and so forth; so they redesigned it and lined up the production of the Potter box and we got nothing from them on production until much later. It was still in 1937. But by the time we had boxes, the season was over, so we had to count 1937 in our business as an absolute

(Deposition of Thomas Irving Potter.)

loss. That was very grievous, because in doing that we lost many dealers that we had.

Q. Now I notice also in 1937 a reference to Apex Electrical Manufacturing Company. What, if any, relationship between Sanitary and Apex?

A. There was a connection there. Apex came to us through Mr. Walter Frantz, who is Vice-President of the Apex Company in Cleveland, and who was in charge of all the mechanical end of their business, production, and so forth; came to me and said that he would like to have a license under our patent for the Potter type box. He explained that for several years past they had been building a conventional type, but had not been very successful with it in competition with the big operators, but they had ample resources and if they had a box such as ours which would lift them above competition, [1130] he felt that he could make the refrigerator department very successful.

Q. What was their main business?

A. Washing machines and ironers and mangles and things of that sort; but they did a small— r had a small department on household refrige'ation.

Q. Well, now, will you continue? Did you reach any agreement?

A. Yes, we gave them a license. We signed the license agreement with them. We gave them, because of their—it wasn't a straight license agreement, if I can put it that way—because connected with that they promised us the thing that we had been hungry for and couldn't afford ourselves; they

(Deposition of Thomas Irving Potter.)

promised us national advertising for this type of box.

Q. Was that a large consideration in this agreement?

A. That was the main consideration, because we had not been able with Potter to nationally advertise. They promised us that they would give the biggest national advertising campaign in back of this box, bigger than anything they had ever had in their industry. That got my interest.

We made them a very special deal. That deal never would have been made if it hadn't been for that consideration. We gave them a license of 1 per cent of their factory net, but to me the main consideration was their promise of launching this nationally. [1131]

After the contract was set, a little time went on, they were to produce this in their own factory, but Mr. Walter Frantz explained that they were having difficulty in matching that in with their production.

He stated that he knew I had production at Sanitary. He wondered whether I could line up a deal for him with Sanitary to get production started, so that later on they could take it in their own plant. I took up the matter with Sanitary. At that time Sanitary had gotten started on building the Potter box. They were also on the same production line building a Sanitary box which was identical and under license from us, except that they had changed the hardware and the name plate. Mr.

(Deposition of Thomas Irving Potter.)

Frantz stated that if we would give him a different type of hardware and put their name plate on it, that would give them a chance to get started. So that was put on the production line at Sanitary for the Apex Company.

Now th Apex Company started their sales then——

Q. Whe n?

A. Approximately the first of the year in 1938. That is when they started sales.

Q. Well, did that come to a conclusion, this license agreement with Apex?

A. Unfortunately it did.

Q. Tell us about it, please. [1132]

A. They produced during that year, and then in 1939, the first we knew of its coming to an end was when, without any notice to us, the Apex Company began dumping their boxes.

We found out only where we had dealers and they dumped them practically at half price and they ordered no more boxes from Sanitary, and I had to take it up from my end to Apex to find out what was going on. At the time I was trying to ascertain that, the two Frantz brothers—one was Walter Frantz and the other was—I don't remember his initials—I don't know the initials. He was the President. He was the financial man.

They got into a violent proxy fight between the two brothers for the control of the Apex Company.

When the fight was over, Mr. Walter Frantz was out. They came to me in Buffalo. He came to

(Deposition of Thomas Irving Potter.)

apologize, rather, for what happened, because he told me he had entered into that deal under his own initiative and in good faith. He explained to me that he couldn't tell me until this proxy fight was over, because he was a director and an officer in the company. But now that he was out, he felt privileged to tell me what really occurred.

He told me that the New York bankers instructed Apex that they would have to drop all refrigeration. I told him that I couldn't understand why a banker could dictate to a big company like Apex. He said that they had [1133] overextended inventories, that they had several million dollars in bankers' loans out to cover them, that if Apex didn't do what the bankers told them to do, the bankers could break them.

Q. All right, Mr. Potter, was the Apex agreement canceled?

A. Yes, it was subsequently canceled on October 24, 1939.

Q. Now, passing on, did you become aware of any Moist Cold competitive refrigerators on the market at about that time?

A. The time I was speaking of—there was Sanitary, Apex and Potter.

Q. Didn't you tell me once about a Continental Company?

A. That is the Sanitary. They had a trade name on their electric business. Sanitary were primarily icebox manufacturers, and the icebox had not been lost at that time. There was still competition be-

(Deposition of Thomas Irving Potter.)

tween iceboxes and electrical refrigerators. Sanitary explained to me that they didn't want to get in bad with the icebox customers so they set up a subsidiary which they called the Sanitary Refrigerator and their boxes were sold under the trade name Sanitary.

Q. Oh, Sanitary, and not Continental?

A. No, excuse me. Under the trade name Continental. They sold iceboxes under Sanitary and electric refrigerators under Continental. But it was the same company.

Q. When was the first that you noticed the Stewart-Warner Dual-Temp. Refrigerator on the market?

A. To the best of my memory, Stewart-Warner was placed on the market in the first part of 1939. Now that is to the [1134] best of my memory. It could have been in the fall of 1938, but in my memory as well as I can locate it, it was in the first of 1939.

Q. Did you have any knowledge with respect to any manufacture by Rex for Stewart-Warner at that time?

A. I had very intimate knowledge at that time, sir.

Q. What was it?

A. Rex was manufacturing for us. They were also manufacturing for Stewart-Warner on their conventional type. They were also manufacturing, if my memory serves me correctly, for the Williams Iceomatic Company, I believe. I believe they

(Deposition of Thomas Irving Potter.)

were manufacturing for Atwater Kent in a small way. I think also—now, this, I am not certain of—I think that they were building some boxes for Philco.

Q. What were they building for Stewart-Warner, if you know?

A. They were building conventional boxes.

Q. Back in 1937; is that correct?"

"A. They were manufacturing back in 1937, 1938 for Stewart-Warner. At the time we were brought into negotiation with Stewart-Warner by Mr. Winter Hull, Stewart-Warner was one of their biggest customers. Then from that time on, after the Stewart-Warner deal fell through, we had added difficulty in getting production. They didn't turn us down, but we had difficulties. [1135]

Q. Who didn't turn you down?

A. Rex did not tell us that they would not produce. We had difficulty in getting it through. I sent Mr. Bommer down there to find out why. I went down there myself at one time.

Q. What did you find out?

A. I found out from Mr. C. C. Hull, the President, that they were having financial difficulties to handle the big volume, that Stewart-Warner had told them that unless Stewart-Warner could put their own production man in charge that Stewart-Warner would pull out. So as I protested with Mr. C. C. Hull on our delays in production, he told me that he was sorry, but his hands were tied because he was in a strange position of owning a business

(Deposition of Thomas Irving Potter.)

and having lost the control of his own production.

Q. Lost it to whom?

A. To the Stewart-Warner through their man that they put down there as a production man. I have forgotten the name of the man. I met him. He was a very dynamic, domineering personality, and he is unquestionably—he ran the works there."

"Q. What was your agreement with one William T. Morris under the date of September 20, 1940, on the agenda there? I am referring to the agenda."

"Q. Now, what was—give us briefly and generally the [1136] negotiations with William T. Morris. Who was he?

A. He was President of the American Chain Company. Mr. Morris had a great deal of experience, and a wonderful background in commercializing patents. Mr. Morris made his first money in the famous Weed chains, and the anti-skid chains for automobiles. Mr. Morris told me at the beginning that he bought the chains with which he assembled the anti-skid chains——

Q. Will you get down to your negotiations with Morris?

A. I am trying to give you the background.

Q. All right.

A. Now, we had been so injured with our commercial efforts we did not have enough working capital to overcome that. Mr. Duncan, who was the patent attorney, in whose office Mr. A. Russell Bond had his office—Mr. Bond was my patent at-

(Deposition of Thomas Irving Potter.)

torney at that time. Mr. Bond died. Mr. Duncan carried on Mr. Bond's patent work that was still in the office for us, representing us. I had met Mr. Duncan while Mr. Bond was alive, and I okayed his taking up and continuing our patent work after Bond's death. So I made numerous trips from Buffalo to New York to confer with him. During one of those trips Mr. Duncan suggested that he was well aware of our general situation and that if I could interest Mr. William T. Morris, the President of the American Chain, in my situation, he felt that that would answer all of our problems. [1137]

He introduced me to Mr. Morris. We had numerous sessions, conferences. It ended up with our giving Mr. Morris a license under the Potter Patents, for the purpose of his taking charge of our entire patent situation, and he would sub-license manufacturers under these Potter Patents. That would relieve us of all the expense and so forth and so on, and he had the prestige and position and he had the capital.

In that agreement, Mr. Morris included in that agreement that in order to make these patents respected, if necessary he would bring proper suits. He would supply all the costs of any litigation, and that he would personally devote his personal time and attention to this, and he would not delegate it to somebody else.

Mr. Ramsey: Mr. Cuningham, may I interrupt? This is a very interesting story. I doubt that it has

(Deposition of Thomas Irving Potter.)

any materiality or pertinence to any issue in this case. This proceedings has been going on now from 2:00 o'clock until half-past three. As you know, this case has been set for pre-trial, and we have accommodated Mr. Potter——

The Witness: And I thank you, sir."

"Q. Will you tell us very briefly, Mr. Potter, so that we can get along here——

A. I will try to make my answers short.

Q. Did this agreement ever get you anything in the way of [1138] licenses or national advertising?

A. Mr. Morris signed that agreement. At the time he signed it, I know he was sincere, because I know there were no jokers in that contract.

Q. Was he able to produce anything?

A. Nothing happened. We couldn't find out what was going on. We began putting pressure on Mr. Morris and Mr. Duncan to find out what was going on.

I had one conference in New York with Mr. Duncan, and as representing Mr. Morris. Mr. Duncan said that as Mr. Morris got into it, he found that he would have to bring suit against different manufacturers and that I could not expect Mr. Morris to sue his customers because the American Chain Company had a large list of customers. Morris owned a lot of patents on bumpers and automobile equipment, and that he would not sue any of them, and, therefore, he was not pushing this deal.

(Deposition of Thomas Irving Potter.)

Q. So what did you do about that situation?

A. I could not get him to drop that position. We urged it. Nothing happened, and so—let me look at my notes here——

Q. I direct your attention to 1941.

A. Yes, sir; in 1941 our attorneys brought suit against William T. Morris for his failure to live up to that contract. We brought suit against him for $500,000. [1139]

Q. May I direct your attention to an item, the second item under 1945? What was the result of that suit?

A. Mr. Morris settled that suit and paid us $100,000 in cash as settlement in that suit.

Q. When was that settlement effected?

A. On April 10, 1945.

Q. Now if you will cast your eyes back to the entry under 1943, did any of your companies start suit against Stewart-Warner?

A. The Refrigeration Patents Corporation started suit against Stewart-Warner for infringement and that was—the suit was filed on August 12, 1943.

Q. Is the complete evidence of that suit contained in the four volumes that are stacked here on your desk?

A. Yes, those are the four volumes of the record in that suit.

Q. What was the result of that suit in the District Court?

A. The District Court——"

(Deposition of Thomas Irving Potter.)

"Q. Now, Mr. Potter, directing your attention to an entry under 1945, was the original of the patent in this suit involved in any other litigation?

A. That was involved with the General Electric Company. They started litigation against us under what they called for a Declaratory [1140] Judgment.

Q. Under what date?

A. That was October 8. They had approached Mr. Bristol to discuss with him the question of our patent, and whether they could build something that would avoid it.

Q. Had the General Electric Company built any moist cold refrigerators prior to that time?

A. No, not to my knowledge.

Q. Was that suit expected by you?

A. When Mr. Bristol stated that they had approached him and wanted to discuss it, I warned him against the tactics of the General Electric Company. This I know definitely. Mr. Bristol said, 'Potter, don't worry. It will not hurt anything if we discuss it with them.' He said, 'I will so handle it that they can't use any discussion against us.'

He had a discussion on a Friday afternoon with the representative of the General Electric Company. Mr. Bristol based his discussion on the fact that anything that was said was off the record, but after that discussion, in which they laid out penciled drawings, sketches, made while they were in his office, they said, 'Mr. Bristol, if this was done this way would that violate your patent?' And he,

(Deposition of Thomas Irving Potter.)

would look at the sketch and read his claim that he felt that would come under.

After five or six of those, they departed on Friday later in the afternoon.

The following Monday morning the papers were served on the officers of the Refrigeration Patents Company under [1141] Declaratory Action, claiming that the Company had threatened them, which it had not done.

Q. Now, what was the result, as you understand it, or the effect, as you understand it, on your original patent of the decision of the Court of Appeals in the Stewart-Warner case?

Mr. Byron: I object to that. That is purely calling for a conclusion.

Mr. Cuningham: You may answer.

A. I didn't get the question.

Mr. Cuningham: Please read it back.

(The Reporter read the question back to the witness.)

A. The first effect of that decision was that I got a flock of letters from all over the United States from patent lawyers, telling me in effect that they felt the judgment was wrong. I remember one letter that told me that if that was to be the law in patents, he might just as well quit his profession."

"Q. What did you do?

A. I immediately turned the matter over to Watson and Bristol to get or to meet the suit. We had had a settlement from Morris, and we had cash

(Deposition of Thomas Irving Potter.)

in hand. We had to pay a contingency to the lawyers who sued Morris, so we didn't have a whole $100,000. I have forgotten exact—— [1142]

Mr. Cuningham: I don't think we need that.

A. (Continued): But what was remaining we turned over to Watson Bristol as a fund to support their work in meeting the General Electric suit.

Q. And you also continued, did you not, with the Stewart-Warner litigation?

A. Yes, they were handling both litigations for us.

Q. Did both litigations come to a sad end so far as you are concerned?

A. Mr. Bristol died in the meantime, and Watson Bristol, because they said that they had run out of cash for making an appeal on the General Electric Company, so Watson Bristol entered into some kind of an arrangement, a stipulation I think you call it, with the General Electric——"

"A. (Continued): The General Electric suit was tied in by our attorneys with the decision of the Stewart-Warner case. They explained to me that because we ran out of funds that they decided they would get the stipulation from General Electric that they would abide, and we would abide by the decision in the Stewart-Warner case.

When the Stewart-Warner case was finally decided against us by the Court of Appeals, and we had appealed it back and forth, when that was finished, they informed me that they had to abide by their agreement with the General [1143] Elec-

(Deposition of Thomas Irving Potter.)

tric and have an order issued in favor of the General Electric.

I insisted on my part that one thing should be made clear in that order, or whatever you call it, legally, and that was that we did not appeal because we did not have the funds to appeal. I did not agree with the findings of the judge in Portland.

Q. Did you then reissue the patent as a result of this litigation?

A. As a result of that litigation, when we had exhausted all that Watson and Bristol told us was our legal rights, and so forth, then I purchased the patent personally, and I took it up with Charles Ladd, a patent lawyer here whom I had known, and asked him whether he could not reissue it, because I had been told that if a patent——"

"Mr. Cuningham: I offer that in evidence and ask that it be marked Plaintiff's Potter's Exhibit 20.

(The photograph identified above was received in evidence and marked Plaintiff's Potter's Exhibit 20.)

Q. I show you the original designed patent, No. 155033, issued August 30, 1949, for a term of 14 years to Thomas Irving Potter, New York, New York. Do you recognize that patent?

A. Yes. That was a design that was embraced, partially [1144] embraced, by this de luxe cabinet that I speak of.

(Deposition of Thomas Irving Potter.)

Mr. Cuningham: I would like to reserve the next exhibit number for the soft copy of that design patent which we can mark later as Plaintiff's Potter's Exhibit 21.

(The soft copy of the design identified above —the design patent—was received in evidence and it was stipulated to mark it later on when the soft copy was obtained as Plaintiff's Potter's Exhibit 21 in evidence.)

A. (Continued): When this man, Sanborn, organized the Continental Refrigerator Corporation —and that has no connection with the Continental Refrigerator of Fond du Lac—that is the name they chose. But he organized that and I turned over my reissued patent to them. I turned over this designed patent and turned over the model for this de luxe cabinet, whatever rights I might have in it, and they were to put capital into the business, and they were going then to go ahead on production, and so forth. I had at that time entered into negotiations with the Carrier people of Syracuse, the air-conditioning people. They were building at that time what they called a front-door opening freezer chest or rather cabinet. They had a production line, very little changes would have incorporated our box from a production standpoint.

The Carrier people agreed that they would [1145] handle the production of this de luxe type, the model which I have or which Moist Cold has. But they would produce that on a volume basis.

(Deposition of Thomas Irving Potter.)

We also lined up a deal with DuParkue—I really don't know how to spell it. It is the largest hotel supply house in the United States. They have offices all over the United States. It is something like DuParkue, but they are the largest hotel supply people, jobbers.

They agreed that they could handle the national distribution of this. That was all consolidated in this Continental Company that Sanborn set up. Then when the Korean War started—pardon me—I mean pardon me for referring to it—all steel was off the market. The Carrier people could not go ahead.

In the meantime, this man, Sanborn, had been trying to organize, and he had told me that he had connection with brokers all through the country, that he would be given free sway in how to organize that company. He would guarantee that he would have the finances inside of 90 days' time. And I am more ashamed of that than anything in my life, because after I got through with it, I considered that he was a phony. I was taken.

Mr. Cuningham: Go ahead.

A. (Continued): I am sorry. Excuse me. He had called a group of people together at a luncheon and explained his [1146] picture of this Continental and wanted them to join him in the financing.

Shortly after that, a Mr.—I think the name was Bradkin—that is approximately the name—came to me and explained he had attended the luncheon of

(Deposition of Thomas Irving Potter.)

Mr. Sanborn, that he did not like Sanborn's setup at all, and he would have nothing to do with it on that basis, but he explained that he was located in Wall Street, that he knew all kinds of money people, and if I would give him the authority, he would try to line up some capital for us. But if he did that, it would have to be on another basis than the basis that Sanborn lined up with the Continental.

The result of that was that shortly after he brought me into Mr. T. Roland Burner and introduced me to Mr. Burner as a man who had a large number of wealthy clients, that he felt could or would be interested in this situation." [1147]

DEPOSITION OF FERDINAND J. BOMMER

April 21, 1955

"Q. And can you tell us what took place?"

"Mr. Byron: Make a note that the witness is now referring to his earlier testimony to refresh his memory, I assume.

A. To the best of my knowledge, this was discussed between Winter Hull and Charles D'Olive."

"Q. Now, incidentally, do you have an independent recollection as to Mr. Charles D'Olive? You ever met him? A. Many times.

Q. What was his connection with the Stewart-Warner Company?

A. Manager of the Refrigeration Department.

Mr. Byron: The same objection.

Q. And now, what sort of domestic electric re-

(Deposition of Ferdinand J. Bommer.)

frigerator was Stewart-Warner Corporation marketing at the time that these conversations first took place between Mr. Hull and Mr. D'Olive?

A. A typical one-compartment refrigerator similar to all others in the industry except the Potter.

Q. Just how, or what condition, were foods kept in, in that type of box?

A. They were subject to the same dehydration as all other refrigerators. [1148]

Q. And they had how many compartments for food preservation? A. One.

Q. And what kind of cooling unit?

A. A conventional frosting evaporator.

Q. And what about machinery for the compressor and condenser and motor?

A. That was similar to all others used in the industry.

Q. And the cooling unit in this refrigerator, that Stewart-Warner was then marketing was located in the food chamber near the top. Is that right?

A. Yes, sir."

"Q. Now, going back to the matter of the Rex Manufacturing Company and Stewart-Warner, were there any negotiations carried on between Stewart-Warner——

Were any negotiations carried on between Stewart-Warner and Mr. Potter with respects to a license under the Potter patents?

A. There were.

Q. And when was that, Mr. Bommer?

(Deposition of Ferdinand J. Bommer.)

A. I would say approximately 1935 or '36. I think that the record should be used for a date of that kind. I don't think we should have to remember back that far. As far as I recall, 1935 or '36. Around that figure." [1149]

"Q. Did Mr. Hull recommend to Mr. D'Olive that he get permission to build the Potter type box?

A. Yes, sir. Yes, sir.

Q. And was it pursuant to that recommendation that Stewart-Warner initiated these negotiations? A. That is correct.

Q. And in that connection, was any opportunity given to Stewart-Warner to examine and test out for the Stewart-Warner Company a Potter refrigerator? A. It was.

Q. And how many Potter refrigerators were sent to Stewart-Warner Company?

A. I know that one was sent, definitely.

Q. Well, did you see it at the Stewart-Warner Company? A. Yes, sir.

Q. And did the refrigerator that Potter sent to Stewart-Warner have in it the advantages you have described? A. It did.

Q. Would you name those principal advantages?

A. It had a frozen storage compartment and a separate air condition compartment.

Q. How about the defrosting?

A. No defrosting necessary.

Q. And what was the type of coil in the air conditioning compartment? [1150]

A. Finned type coil.

(Deposition of Ferdinand J. Bommer.)

Q. Now, subsequent to this model being afforded to Stewart-Warner, did they produce a different type of refrigerator than they had produced earlier? A. They did.

Q. What type did they produce?

A. A model similar to the Potter refrigerators.

Q. Did you see the later model they produced?

A. Yes, sir. Many of them.

Q. And can you describe whether it was a replica of the Potter?

A. It was a two-compartment refrigerator very similar to the Potter.

Q. And did it have the same advantageous features that the Potter had? A. It did.

Q. Will you name them?

Will you name those advantages?

A. I say, it was a two-compartment refrigerator, one compartment arranged as frozen foods, and ice-making compartment, and also a fresh food compartment for the storage of foods over the freezing point of water.

Q. Did the Stewart-Warner Company, to your own knowledge, make any representations to the trade and the public as to the ability of its new refrigerator to keep foods in an [1151] air-conditioned condition?

A. They made—they made similar claims to those made all along by the Potter Refrigerator Company.

Q. And what about defrosting?

(Deposition of Ferdinand J. Bommer.)

A. They made the same claims for defrosting; that it wasn't necessary to defrost.

Q. Now, did you find the Stewart-Warner box in any potential customer of the Potter Company? The new box? A. I did.

Q. Where?

A. At the Jones Appliance Company in Milwaukee.

Q. Can you describe what occurred there?

A. I had been negotiating with the Jones Appliance Company to handle the Potter line of domestic electric refrigerators. When I went to the Jones Company to complete the negotiation and arrange for their first shipment of refrigerators, they had purchased a quantity of Stewart-Warner refrigerators, which they told me, at a price advantage——

(Continuing): Over prices quoted by Potter Refrigerator Company and therefore broke off negotiations with us.

I saw price tags on the refrigerators, which I noted at that time, which were lower than the prices of Potter refrigerators of approximate size. [1152]

Q. When did the Jones Company say anything to you about whether they—how did they compare? Potter and Stewart-Warner refrigerators?

A. In what way?

Q. What did they say about the comparability, if anything?

A. They claimed the Stewart-Warner would do

(Deposition of Ferdinand J. Bommer.)

everything that the Potter refrigerator would do. That was a Stewart-Warner claim.

Q. What about the price?

A. I said the prices on the tags on the boxes were lower than comparable models of Potter.

Q. Now, when Stewart-Warner produced the Potter type of refrigerator, where did they get their boxes from?

A. They were made by Rex Manufacturing Company.

Q. And did Potter then have any difficulty getting boxes from the Rex Manufacturing Company?

A. We did.

Q. And was Potter unable, as a result, to deliver Potter refrigerators to his customers?

A. Yes, sir.

Q. Did Stewart-Warner representatives tell you at any time——

Now, what was said—withdraw it—what was said to you by representatives of Stewart-Warner with respect to their production of a two-compartment box with an air-conditioned portion of it? [1153]

A. Mr. Berner, I don't believe I understand you.

Q. Well, you have testified Stewart-Warner produced a box comparable to the Potter box. Is that right? A. That is correct.

Q. You have also testified that these Potter boxes, they had, for their examination?

A. Yes, sir.

Q. Now, did they have a Potter box as a result

(Deposition of Ferdinand J. Bommer.)

of a negotiation for license from the Potter Company? A. No, sir.

Q. Well, did the Stewart-Warner Company ever negotiate for a license?

A. There were discussions about Stewart-Warner obtaining a Potter license.

Q. And was it pursuant to those discussions that a model Potter box was furnished to Stewart-Warner? A. That's right.

Q. Did Stewart-Warner ever take a license?

A. No, sir.

Q. Did they ever take and use the Potter innovations and developments? A. Yes, sir.

Q. Now, did Stewart-Warner do any testing in connection with the Potter box that they had?

A. They did. [1154]

Q. Will you describe that test?

A. They put the Potter refrigerator in a constant temperature room and put samples of food in the refrigerator which had been weighed before they were put in. After they were put in the refrigerator, the refrigerator was closed tightly for 24 to 48 hours and then the food was taken out and reweighed to determine a rate of dehydration by the difference in weight before and after.

Q. Now, are those conditions——

Mr. Byron: You haven't finished your answer, have you?

The Witness: I think that that was the method of test. As I said before, it was to weigh samples of food, put in the refrigerator, close the door and

(Deposition of Ferdinand J. Bommer.)

leave it closed for a period of from 24 to 48 hours, and, at the end of that noted, take the food out of the refrigerator and reweigh it so that they could determine a loss of weight in the food due to the dehydration which had taken place during its storage.

Q. Now, were those conditions comparable to the ordinary household wife's usual conditions of test?

A. They were not.

(At this point a short recess was taken.)

Q. Now, was that pointed out to Stewart-Warner that the test conditions were different than in a normal household? A. It was.

Q. And to your knowledge did they then conduct tests of [1155] the Potter refrigerator as it would be used in a household? A. I don't know.

Q. Now, after these tests and after the negotiation between Potter and Stewart-Warner were broken off, did Stewart-Warner then produce a Potter type refrigerator? A. They did.

Q. Will you describe the Stewart-Warner box that was produced subsequent to the negotiations and the test or sample box that was sent to Stewart-Warner by Potter?

A. It was a two-compartment refrigerator; one compartment for frozen storage of foods and the other for fresh foods. The fresh food compartment was supposed to be an air-conditioned compartment.

Q. And Stewart-Warner claimed that?

A. Yes, sir.

(Deposition of Ferdinand J. Bommer.)

Q. Now, after Stewart-Warner went into the production of the two-compartment box, from whom did they get their cabinets?

A. Rex Manufacturing Company.

Q. Was that the company that supplied the two-compartment box to Potter? A. That is.

Q. And did Potter then have difficulty in getting delivery of its two-compartment boxes from Rex?

A. We did.

Q. What did Potter then do about that? [1156]

A. We attempted to improve production schedules.

Q. When you failed to do that, what did you do?

A. Eventually?

Q. Yes.

A. Went to another source of supply.

Q. And was that costly to the Potter Company?

A. Very much.

Q. Would you describe what that meant to the Potter Company?

A. Well, it meant about a devastating loss of dealers.

Q. Go ahead.

A. We didn't have merchandise to deliver for a long time. Tools and dies and fixtures had to be moved from Connersville, Indiana, to Fond du Lac, Wisconsin. The tools that were used at Rex did not fit the machines used in production at the Sanitary Refrigerator Company in a lot of instances and new tools and dies had to be made, and adjustments made in the Potter cabinets, to the point

(Deposition of Ferdinand J. Bommer.)

that there were several months, not only of additional expense in adapting the tooling to the new source of supply, but also in the meantime, the loss in business that we had because we were out of merchandise.

Q. Now, do you know what arrangements, if any, existed between Stewart-Warner and Rex with respect to finances?

A. Do I know what?

If I did, I don't remember.

Q. Well, did Rex have any financial [1157] difficulties?

A. Rex had financial difficulties. Yes.

Q. And did Stewart-Warner advance them any funds? A. I don't remember.

Q. Well, was Stewart-Warner allowed to put an expediter in the Rex plant? A. Yes, sir.

Q. What was his name?

A. His name was Pat. Whether it was Walsh or Ryan—it was a short Irish name I don't remember—but Pat was his name.

Q. Where was he located?

A. In Connersville plant.

Q. At the Rex plant?

A. The Rex plant.

Connersville.

Q. Now, were all the Potter two-temperature boxes made by the Rex Manufacturing Company for Potter prior to moving to Standard? Were they the sole source of supply for Potter of the two-temperature boxes?

(Deposition of Ferdinand J. Bommer.)

A. Prior to moving to Sanitary?

Q. Yes. A. Yes, sir.

Q. Mr. Bommer, there were some boxes manufactured by the Leonard Refrigerator Company at one short period of time as an auxiliary line of cabinets. Was that a single compartment? [1158]

A. Single-compartment box was manufactured by Leonard.

Q. What was the chief sales of the Potter Company? Was it a single or double type?

A. Double-compartment refrigerator. Two-compartment refrigerator.

Q. Now, as a result of transferring to Sanitary, you mentioned difficulty with dealers. Did you lose any? A. We lost a lot of dealers.

Q. Now, do you know whether any dealers took the Stewart-Warner box of this Potter type?

A. You are talking about regular Potter dealers?

Q. Yes.

A. There were some dealers that took on Stewart-Warner refrigerators.

Q. Now, did you, personally, see the Stewart-Warner two-compartment boxes at the Rex Manufacturing Company? A. Yes, sir.

Q. Now, the Potter Company got the Sanitary Manufacturing Corporation to manufacture its cabinets from and after 1937, was it?

A. Yes, sir.

Q. And did the Sanitary Manufacturing Com-

(Deposition of Ferdinand J. Bommer.)

pany have a license to manufacture the Potter boxes? A. They did.

Q. Potter type refrigerators from their own account? [1159] A. They did.

Q. And would you describe that operation briefly?

A. You mean the necessary negotiations for the license?

Q. No. No, just what they did.

A. You mean what they did? They built Potter type refrigerators, two-compartment refrigerators, almost identical to the Potter refrigerators, and sold them under the name of Continental, which was a brand name that they owned.

Q. And did they do that under a license from the Potter Company?

A. They did that under a direct license.

Q. And under what name did they sell theirs?

A. Continental.

Q. Did they have their own dealer organization?

A. They had their own dealer organization.

Q. Did you go with Sanitary Manufacturing Company? A. Become employed with them?

Q. Yes. A. Yes.

Q. About when was that?

A. August, 1940.

Q. Were they then a licensee of the Potter Company, or became one shortly thereafter?

A. No. Their license was taken out long before 1940. Whether the license was still in existence in

(Deposition of Ferdinand J. Bommer.)

August, 1940, [1160] when I went there, I don't remember those exact dates at this time.

Q. But, in any event, you know that they were a licensee of the Potter Manufacturing Company and they did produce comparable boxes, is that right, of Potter?

A. I, personally, conducted most of the negotiations under which the license agreements were signed.

Q. And that was while you were with the Potter Company?

A. When I was with Potter Company.

Q. Whom did you conduct negotiations with?

A. Mr. B. K. Miller, President of Sanitary Refrigerator Company.

Q And they culminated how?"

"Q. Now, could you describe the effect of the Stewart-Warner dual temperature refrigerator on the business of Potter Refrigerator Company?"

"A. The Stewart-Warner promotion of their two-temperature refrigerators was very detrimental to the Potter Refrigerator Company because of the widespread claims and the price differences, more favorable terms, more favorable advertising allowances, which Stewart-Warner afforded to their dealers.

Q. Than the Potter?

A. That Potter could afford. [1161]

Q. Which company was more adequately financed, to your knowledge?

A. Stewart-Warner Company.

(Deposition of Ferdinand J. Bommer.)

Q. Was Potter relatively new and small? Was Potter a relatively small concern as compared to the Stewart-Warner Corporation? A. It was.

Q. What percentage of the size of Stewart-Warner would you say that Potter was?

A. I would say that it was very small. As to what per cent, I wouldn't say.

Q. You mean very small as compared to Stewart-Warner? A. Very small."

"Q. I am asking for Potter, in comparison to Stewart-Warner. You understand that, do you not, Mr. Bommer? A. Yes, sir.

Q. And what do you say the comparison is?

A. I said that Potter Refrigerator Company was very small compared to the Stewart-Warner Corporation.

Q. Now, when did you sever your connections with Potter Refrigerator Corporation?

A. June, 1939."

"Q. Why did you leave the Potter Refrigerator Corporation? [1162]

A. I left the Potter Refrigerator Company because I thought that conditions were such that Potter business had shrunk to an extent that I wanted to make a new connection with somebody that had a greater possibility for me, personally.

Q. Did that have anything to do with Stewart-Warner?

A. I would say the results of the shrinking of the Potter business, due to Stewart-Warner promotion, was a factor in my decision to leave."

(Deposition of Ferdinand J. Bommer.)

"Q. Now, when you left the Potter Refrigerator Company, did you receive anything from them? A. I did.

Q. What was that?

A. I received a certificate for two hundred shares in the Refrigerator Patents Corporation.

Q. And do you still own those shares?

A. I still own them."

Cross-Examination

By Mr. Byron:

"A. I said that the sales was as a result, not a prime condition. The prime condition was our delays in production. The result was, we couldn't deliver and therefore there weren't as many sales to record.

Q. Why didn't the Jewett Company manufacture more refrigerator [1163] cabinets for Potter than they did? That is, the 25, 50, or 100 that you mentioned.

A. Why didn't they go into a larger production setup?

Q. Yes.

A. Because the Jewett Refrigerator Company couldn't afford to go in it. It was just financial obstacles that we couldn't surmount."

"Q. Please refer to the specification of the reissue of Patent in suit, read that specification, and state whether or not it mentions fins, and fins particularly on the cooling coil 25 in the upper, relatively warm, chamber 14.

(Deposition of Ferdinand J. Bommer.)

A. There are two references 25 from the drawing. In the specification, No. 25 is described as a cooling coil. The words, 'cooling coil' cannot be construed in any other way but to include both of the notations on the drawing which designate one figure 25 pointing to the coils and the other figure 25 pointing to the fins which support the coils."

"Q. The question is: Refer to the specification in this patent in suit, read that specification and state whether or not you find the word 'fins' in that specification as related to the coil 25, or any other coil.

A. As a refrigerating engineer, the word 'fins' in the description is not necessary inasmuch as the drawing distinctly [1164] points to a—to both sections of the coil, and it is inclusive in the one unit."

"A. I would say that, as indicated on the drawing on that patent, a refrigerating engineer would know that it was a finned coil.

Q. Well, now, what appears there in Fig. 2 of the drawings is just an oblong outline, isn't it? 25?

A. Yes, sir.

Q. You wouldn't know. It might be a box, might it not?

A. I would say that this, as drawn is an engineer's designation of a finned coil. Would that answer your question?"

(Deposition of Ferdinand J. Bommer.)

Redirect Examination

By Mr. Berner:

"Q. Now, was the failure of Rex to deliver Potter boxes the reason why you made these frequent trips to the Rex factory?

Mr. Byron: I object. That's leading, to begin with.

A. Yes, sir.

Mr. Byron: And it's immaterial. Irrelevant.

Q. And did that occasion expense to the Potter Refrigerator Corporation?

Mr. Byron: The same objection.

A. A great deal of expense.

Q. Both of funds and effort?" [1165]

DEPOSITION OF ROSS D. SIRAGUSA

April 26, 1955

"Q. Can you tell us briefly for the record the history of the product development of Admiral Corporation?

A. It is in a little book and that is available to you.

Q. I would be very glad to have it. May I have a copy?

A. Yes. That gives you the thumbnail sketch of the last twenty years.

Mr. Berner: The book will be marked Siragusa Exhibit No. 1."

(Deposition of Ross D. Siragusa.)

"Q. If you will throw your mind back, Mr. Siragusa, to that period, will you tell us briefly what led to this deal?

Mr. Byron: Objection. It is entirely irrelevant and immaterial, what led to this deal, insofar as these issues are concerned, as far as the issues in this suit are concerned.

Mr. Cuningham: You may answer.

A. To broaden our distribution.

Q. (By Mr. Cuningham): Did you initiate this transaction with Mr. Elliff?

Mr. Byron: Same objection.

The Witness: I believe Elliff came to me. I am sure he did.

Q. (By Mr. Cuningham): And that was, of course, some time [1166] prior to January 22, 1944, was it not?

A. Well, I don't know when he came to us, but he did.

Q. Can you give me the time? Was it during the suspension of the refrigeration business during the war? A. I am sure it was.

Q. Well, what did he suggest?

A. I don't recall the conversation, sir.

Q. You don't recall anything about what led you to make this deal?

A. No. It is so long ago, it is very difficult to remember. I just recall that he arranged for a meeting with Mr. Hiter, and the purpose was to sell, that is, Stewart-Warner to sell the appliance division, and we made a deal. That is it.

(Deposition of Ross D. Siragusa.)

Q. Who, besides Mr. Elliff and Hiter, do you recall discussing this matter with, on behalf of Stewart-Warner?

A. I don't recall anybody else, unless the lawyers might have sat in on it, and I don't remember their names.

Q. They were on the formalities of the agreement, I suppose, and the deal was made before the lawyers came in? A. Yes, I am sure it was.

Q. Who else in the Admiral Corporation besides yourself participated?

A. Myself and a lawyer. I think Frank Uriell —no, it wasn't Frank Uriell. I can't tell you the name of the firm, who handled that. Williams, Castle, McCarthy, it might have [1167] been.

Mr. Baltz: I don't know.

The Witness: I don't recall.

Q. (By Mr. Cuningham): But aside from the lawyers, was there any other individual involved?

A. Not that I recall.

Q. On behalf of Admiral?

A. Yes. It was a very small deal, Mr. Cuningham, and I took it to the board of directors and they passed it and that was it.

Q. Yes, I realize that. Were you then aware of the pendency of a suit——

A. I don't recall. I might have been at the time. I might have been at the time, but I do not recall.

Q. You do not recall? A. No."

Mr. Cuningham: This may refresh your recollection, and thank you, Mr. Byron.

(Deposition of Ross D. Siragusa.)

I will read to you subparagraph H of Section II of the option agreement.

Mr. Byron: To which I make objection, the same objection, irrelevant and immaterial.

Mr. Cuningham: 'Stewart will indemnify Admiral against any loss from infringement of the Potter [1168] Patents arising prior to the date of the exercise of the option. Stewart will confer with Admiral before making any final settlement involving such Potter patents.'

The Witness: Now, what was your question?

Q. (By Mr. Cuningham): Does that refresh your recollection? A. Really, it doesn't.

Q. Had you ever heard of the Potter patents before this moment?

A. Well, I have, rather infrequently.

Q. But over a sustained period of time, is that correct? A. Yes.

Q. You have been informed, I suppose, that the plaintiffs in this action are the successors to the plaintiffs in the Stewart-Warner action and are suing on a reissue of what is referred to as the Potter patent?

A. All right. I will take that answer of yours, Mr. Cuningham. I believe it."

"Q. Now, Mr. Siragusa, I won't bother to refer to the option agreement that was annexed to the interrogatories, but I will state to you that it expressly carried with it from Stewart-Warner to Admiral lock, stock and barrel the household appliance business, refrigerators and ranges, includ-

(Deposition of Ross D. Siragusa.)

ing patents, dies, and everything. The agreement speaks for itself. [1169]

Do you recall how you operated when you took over this business during the transition period? What did you take from Stewart-Warner in the way of assets, properties, generally?

A. Well, as I recall, we took over certain tools and dies for both refrigerators and electric ranges. We took over certain equipment—not very much equipment—as a matter of fact, very little. Certain trade-marks.

Q. How about technical information?

A. Well, the technical information followed with Evans Morton and the one or two or three or four men that he brought with him. I don't recall how many men he brought with him.

Q. You don't recall now the names?

A. No, I don't.

Q. Of any of them?

A. But Mr. Morton, when you cross-examine him, he will give you that information.

Q. Thank you, sir, I will ask him that.

A. That is about all that we got. The trade-mark 'Dual-Temp' and some other trade-marks, too, which I don't recall. Maybe Zero-Zone, something like that.

Q. And patents?

A. Yes, I believe the contract specified any patents or patent applications." [1170]

"Q. Can you give me a statement, Mr. Siragusa, of what are the patent policies in general of the

(Deposition of Ross D. Siragusa.)

Admiral Corporation? Now, maybe I can help by trying to be more specific. For example, what is your policy with respect to clearance as to adversely held patents before you manufacture anything?

A. Well, I know that we try diligently, to the best of your ability, to engineer around any patents that we believe might conflict with our own ideas. Sometimes we do and sometimes we don't. But we try to engineer around any and all patents that we feel are valid patents."

"Q. Who was the first that you know of to come out with a two-temperature household refrigerator?

Mr. Byron: I object to it. It is irrelevant and immaterial.

A. I really don't know.

Q. (By Mr. Cuningham): Was it Stewart-Warner? A. It might have been.

Q. Do you know of anybody earlier?

A. I don't know of anybody earlier."

"Q. Have you had any experience in reading and interpreting patents?

A. No use in showing it to me because I couldn't read a diagram from an architectural [1171] drawing.

Q. Who would be best qualified in the Admiral organization to give us such assistance?

A. I would imagine Mr. Morton would."

(Deposition of Ross D. Siragusa.)

Redirect Examination

By Mr. Cuningham:

"Q. You mentioned as examples of your respect for adversely held patents the Radio Corporation of America and Hazeltine Corporation. Is it not a fact that you brought a declaratory judgment suit against the Radio Corporation of America to declare invalid each of its 10,000 patents in the District of Delaware a few years ago?

Mr. Byron: I object. It is irrelevant and immaterial.

The Witness: I don't recall. Can I answer that?

Mr. Byron: Yes, sure.

A. I believe we did. I believe we did.

Q. (By Mr. Cuningham): And I believe you backed down and settled the case, did you not?

A. Yes.

Q. You set up some antitrust defenses, as I recall it? A. Yes, I think so.

Q. Is that an example of your respect and cooperation on other patents?

A. Well, Mr. Cuningham, I would rather not answer that question because the answer would be so involved. There would [1172] be so many facets involved in a 10,000-patent group. Our license there would be involved. I would rather not answer the question.

Q. Did you respect the Armstrong patents in the electronic field?

(Deposition of Ross D. Siragusa.)

A. No, because certain RCA patents that we operated under got us around very nicely the Armstrong patents, we thought.

Q. Are you presently sued by the Armstrong people?

A. I believe that we are being sued by the Armstrong people.

Q. What reserves do you set up for patent liability in the Admiral Corporation?

A. I believe our annual report will answer your question.

Q. What reserves have you set up for Potter liability? A. I don't know.

Q. Will you ascertain that information and let me know, please?

A. I don't think we have set up any reserves because we don't feel that Potter has a legitimate claim.

Q. But you are not sure. Will you be sure and let me know?

A. Mr. Baltz, you can make a note and find out if we set up a reserve on Potter. I am confident we have not."

"Mr. Byron: No. We will look up the information.

The Witness: We will look it up on Potter.

Mr. Cuningham: And you will advise me? [1173]

The Witness: And we will advise you if we have a reserve set up. I can tell you now we probably have not.

Mr. Cuningham: Mr. Berner directs my atten-

(Deposition of Ross D. Siragusa.)

tion to Note F in your annual statement for 1954, on page 22, and I quote:

'The company is contingently liable under pending lawsuits, re purchase agreements and guarantees, the effect of which, in the opinion of management, will not materially affect the business of the company.'

Q. Does that contingent liability include the lawsuit in which you are now testifying?

A. I am confident that it does not. However, that question will be answered by Mr. Baltz.

Q. What contingent liabilities under pending lawsuits did you have in mind in making that statement?

A. I don't know. You would have to ask the accountants.

Q. Who would know?

A. Leidesdorf would know. George Driscoll would know." [1174]

DEPOSITION OF WALLACE C. JOHNSON

"Q. There is a rather curious statement at page 11 of Siragusa Exhibit 1. I think I will read the two short paragraphs, and I quote:

'In 1944, Admiral learned that Stewart-Warner was willing to sell"——

'In 1944, Admiral learned that Stewart-Warner was willing to sell its luxury class refrigerator called the Dual-Temp, because it was unfamiliar with white goods and distribution problems in this field.'"

(Deposition of Wallace C. Johnson.)

"Q. Continuing with the quote, a new paragraph:

'Admiral acquired the patents, tools, dies and engineering equipment for the Dual-Temp, the first and only genuine combination home freezer-refrigerator made at that time.'

Was it your understanding that that was the first combination freezer-refrigerator on the market?

A. Well, I never even thought about it at that time.

Q. I don't think that is quite what this sentence says. I am trying to interpret the sentence. It is a curious sentence. I will read it again:

'* * * the Dual-Temp, the first and only genuine combination home freezer-refrigerator [1175] made at that time.'

Now, of course, 'at that time' could refer to the precise year 1944, but it wouldn't make sense because nobody was making anything for civilian use at that time in the refrigeration line, were they?

A. Not that I can recall.

Q. It must mean at that general early 1940 period. A. Yes."

"Q. Now, the booklet, Siragusa Exhibit 1, page 12, says that the company poured $750,000.00 into voicing its claim that the best postwar appliances and radios would be those which bore the Admiral trade-mark.

Was that an unusual sum, $750,000.00, to spend on voicing such a claim?

(Deposition of Wallace C. Johnson.)

A. I don't think I would be qualified to answer that.

Q. Does it seem like that to you? Would you call that about normal?

A. I wouldn't know what the other people spent.

Q. I mean normal for Admiral Corporation.

A. What?

Q. In one year, $750,000.00 in advertising.

A. Well, as that states there, that was before we produced anything, isn't it?

Q. Yes, in 1944. [1176]

A. It is a promise from Admiral. They are specifying we spent that money to tell the public.

Q. What is the normal advertising budget on just refrigeration alone for Admiral to spend?

A. Figure about five per cent.

Q. Five per cent of what?

A. Of your total billing.

Q. That is the general rule, is it?

A. General. I would say it could be four and a half per cent, but between four and a half per cent and five per cent.

Q. Does that apply to all appliances?

A. Practically so. I mean, you might not spend that much on air conditioners, but generally speaking, on appliances it is four and a half to five per cent. Now, when I say that, I should say that is into your manufacturing costs, not of the necessary distributor billing. But you figure your cost of making the product, and you figure five per cent in for advertising over all.

(Deposition of Wallace C. Johnson.)

Q. It would be lower than that on distributor billing? A. On distributor billing, yes.

Q. Is that about the same for the other products, radios and television? A. About the same.

Q. Has that been true during the postwar period generally? A. Postwar period? [1177]

Q. Yes.

A. Well, I wouldn't know that, and I wouldn't say that we had that much in right at the start either. I really wouldn't know that.

Q. I mean after the war.

A. I know, but I say for the first couple of years I was not connected with that end of the business and I couldn't tell you what we spent at that time.

Q. But since the last few years, that has been true?

A. That is right. I would say in the last four or five years it has been true.

Q. Do you know, Mr. Johnson, whether Admiral has advertised in any other place that its predecessor, Stewart-Warner, was first with the combination freezer-refrigerator? A. No.

Q. That hasn't been the usual pitch, has it?

A. Well, what do you mean by that?

Q. Well, I mean, I find one example that I read to you on the record here. I wondered if that is a unique and isolated example?

A. Oh, I imagine there have been other times when that has been used. I couldn't tell you where or when.

(Deposition of Wallace C. Johnson.)

Q. Is that the general impression you had, that the Stewart-Warner was first with such a combination?

A. Well, the general impression, but I [1178] never——

Q. You never checked it?

A. Never checked it.

Q. Have you ever had anything to do with patent angles of the refrigeration business?

A. No, sir, I have not.

Q. Have you ever read a patent in the refrigeration field? A. No, I haven't." [1179]

DEPOSITION OF EDMOND I. EGER

"Q. What is this booklet which has been marked Siragusa Exhibit 1, Mr. Eger, if you know?

A. I have seen it before. I have read it. I believe it is a brief history of the company.

Q. Do you know who wrote this book?

A. No, I really don't.

Q. Any idea when it was published?

A. I would have to guess about three years ago. Is there any date in there?

Q. Yes, sir, there is a date in the text which I will show you, if I find it. June 30, 1933. That is in the text. There is no date on the booklet itself that I am able to find. So I assume it was written after that, and that would bring it down to the last two years? A. That is right.

Q. Was it published before you joined the company? A. Yes.

(Deposition of Edmond I. Eger.)

Q. Is that the sort of publication that either of the agencies work on or would that be a house advertising department job?

A. It could be either."

"A. Our budget for this year for the appliance division will run around two million dollars. [1180]

Q. That is for all appliances?

A. That is for all appliances.

Q. Can you break it down for refrigeration?

A. Well, roughly I would say about a million and three-quarters, around there.

Q. For refrigerators? A. Yes.

Q. The balance for the other items?

A. Yes, the balance for the ranges and so on.

Q. $1,750,000.00, is that right?

A. That is right.

Q. Is that further breakdownable as to the Dual-Temp and the conventional type?

A. No, sir.

Q. Is it your practice to advertise both types together or do you run separate ads on the two types?

A. We have run separate ads.

Q. Have you any general practice on that?

A. No.

Q. Just as the spirit moves you?

A. Well, I would hardly put it that way, but currently we are concentrating on the Dual-Temp."

"Q. You were aware back in those years 1945 to 1948, were you not, that Admiral had taken over

(Deposition of Edmond I. Eger.)

the business of Stewart-Warner [1181] on the Dual-Temp? A. Yes, I was.

Q. Had you any familiarity with the prewar business of Stewart-Warner in Dual-Temp refrigerators? A. No, sir.

Q. Did you in connection with your work in those years have any occasion to go into the prior advertising practices of Stewart-Warner in the Dual-Temp, as a successor to that business?

A. We studied the advertising that they had done in the past, yes.

Q. Can I show you, or I do show you about fourteen pages in the Stewart-Warner record, beginning specifically—I show you more than that. At page 2,087, and running through 2,114, which are largely a collection of Stewart-Warner advertising."

"Q. Do you recognize any of those items, and if so, you can identify them by the page number, as items that came to your attention at that time.

A. What was the last page?

Mr. Byron: 2,114.

A. I don't recall ever seeing any of this.

Q. (By Mr. Cuningham): That is, your testimony is that you don't now recall ever seeing any of this? [1182] A. That is correct.

Q. You don't wish to deny that you might not have seen one of them, do you?

A. It is possible that I did.

(Deposition of Edmond I. Eger.)

Q. You knew the trade-mark 'Dual-Temp' was assigned by Steward-Warner to Admiral along with the business, did you not?

A. Well, I assumed so. There wasn't any question about using it.

Q. Did you in your advertising or any publicity make reference, and I mean reference as a general rule, in the early days, to the fact that you were successors to that business of Stewart-Warner, and by you I mean Admiral Corporation?

A. My recollection would be to the contrary, that we diligently avoided any reference to Stewart-Warner.

Q. Is that confined to national advertising or is that general policy, that you avoided it?

A. No, I am talking about advertising.

Q. Or publicity material?

A. No, I am confining my remarks to advertising. When you say 'national,' I have in mind also newspaper advertising, circulars, whatever we were responsible for preparing.

Q. Or little publications like this book, Siragusa Exhibit 1?

A. I wouldn't put that in the category that I am referring [1183] to. Offhand, I would refer to that as a publicity release.

Q. Well, then, do you want to except publicity releases? A. Yes.

Q. You didn't avoid reference to Stewart-Warner in your publicity releases?

A. I wouldn't know that. We were not responsi-

(Deposition of Edmond I. Eger.)

ble for the publicity releases. I want to make it clear, there was a different agency, Steve Hannigan, that handled publicity. We only handled advertising.

Q. So you might not know about that?

A. That is correct.

Q. Well, I don't want to misunderstand you. Was it a definite policy not to refer to Stewart-Warner—— A. In our advertising.

Q. ——as the predecessor of Admiral?

A. That is correct.

Q. Do you recall ever making any claims that Stewart-Warner was the first with a combination home freezer-refrigerator? A. No.

Q. I quote from page 11 of Siragusa Exhibit 1: 'Admiral acquired the patents, tools, dies and engineering equipment for the Dual-Temp, the first and only genuine combination home freezer-refrigerator made at that time.'

The reference to 'then' is the early 1940's [1184] as I understand it.

Was that your understanding, if you had any understanding, as to who was first with a combination freezer-refrigerator?

A. I will answer it, yes.

Q. That is, that Stewart-Warner was the first?

A. That is correct, yes.

Q. Upon what do you believe that impression was based?

A. Either because I was told that or from the literature I did see.

(Deposition of Edmond I. Eger.)

Q. Have you seen similar statements to the one I quoted, similar in substance, I mean?

A. I believe so, in publicity releases.

Q. Can you recall any of them?

A. No, not specifically.

Q. But you think that claim has been made before? A. I think so.

Q. Can you give me an approximate date of anything you recall making that claim?

A. No, I really can't.

Q. Could you relate it to that 1945-1948 period?

A. Well, that would be my assumption, that that would be when it would have been made." [1185]

DEPOSITION OF EVANS T. MORTON

April 28, 1955

"Q. After you went with the development laboratory of Stewart-Warner did Stewart-Warner make any attempts to develop a moist cold two-temperature box?

A. The answer, I think, would be yes. I was hired specifically and told that was to be one of the major projects for that job.

Q. (By Mr. Cuningham): Did you devote a substantial part of your time from August, 1936, on to such development?

A. When you say 'substantial' that would mean more than half of my time, I would assume?

Q. Whatever it was, Mr. Morton.

(Deposition of Evans T. Morton.)

A. I would say a small part of my time was devoted to that.

Q. Can you give me some percentage figure? It is a guess, I realize.

A. Over that entire period I would say probably 20 or 25 per cent.

Q. I will show you a schematic drawing which appears on page 2,534, and is marked somebody's exhibit, I think it is Defendants' Exhibit 111.

Is that a correct diagrammatic showing of the Dual-Temp refrigerator put out commerically by Stewart-Warner? A. Yes.

Q. Would that be correct as to all models up until you left [1186] Stewart-Warner in 1944, or I guess it was 1943?

A. From a diagrammatic standpoint, yes.

Q. Well, it shows the refrigerator circuit correctly, does it not? A. Yes." [1187]

DEPOSITION OF THEODORE K. QUINN

April 19, 1955

"Q. Have you had the temerity, Mr. Quinn, to publish any writings giving your qualification?

A. Yes, I left the General Electric Company in 1936, and afterwards published or wrote several books dealing with large organizations and economics generally, including one book entitled 'Giant Business Threat to Democracy'——

It was published by the Exposition Press in New York and carries copyright notice in 1953.

(Deposition of Theodore K. Quinn.)

Q. By the way, this wasn't published as a result of any conversations you and I had, was it, Mr. Quinn? A. No, sir."

"Q. Is that the patent that covers the invention referred to at page 216 of your book?

A. Well, I cannot say that I examined the patent in connection with that particular statement. I simply reported in my book what was just general information and knowledge I thought.

Q. I want to be entirely clear on that, Mr. Quinn.

A. I didn't know that there would ever be any lawsuit about it.

Q. Perhaps you had better tell us in what connection you [1188] have seen this patent when you read it with respect to this book. It is my understanding that it was after you wrote the book; is that correct?

A. Well, as an executive in charge at that time, I looked over all the new developments and while I am not a technical man I had general information in regard to it as far back as that, but I also have seen it since then.

Q. Well, so far as you can tell, being a layman and not an expert, a patent lawyer, does that refer to what you meant by Moist Cold?

A. Oh, yes.

Q. I suppose this is subject to Mr. Byron's objection, but I happen to find in front of me a clipping from the New York Times under date of May 11, 1953. I don't know what page, but it is probably

(Deposition of Theodore K. Quinn.)

in the Book Review Section, reviewing Plaintiff's Quinn Exhibit 2. A. Yes.

Mr. Cuningham: I ask that that be marked Plaintiff's Quinn Exhibit 3.

Q. Mr. Quinn, have you ever been called upon to testify in connection with any public issues and particularly in connection with any small business inquiries of the Government?"

"Q. Mr. Quinn, I have before me a publication entitled, 'I [1189] Quit Monster Business,' apparently written by you. I do not wish to offer it in evidence, but did you write this? A. Yes.

Mr. Byron: I object, because it has no pertinency whatsoever. What Mr. Quinn decided to do, working for one corporation or quitting that corporation, has nothing to do with the question of infringement or validity of the patent.

Mr. Cuningham: I wish to quote a passage from this publication, on page 25——

Mr. Byron: Same objection.

Mr. Cuningham: ——as follows, 'The poor inventor can hardly afford to litigate at all, and usually feels forced to surrender. Only those who have the means can indulge as they do in the other patent abuses such as: Fencing, which consists of surrounding a legitimate patent with numerous additional inventions, anticipating all possible improvements.'

Mr. Byron: I object, for the same reason.

Q. (By Mr. Cuningham): Is that a correct

(Deposition of Theodore K. Quinn.)

definition according to your understanding of the term patent fencing?

A. That is my idea of it. I am conscious of being in a strange land now. We are in the presence of experts.

Mr. Cuningham (Continuing with quotation): ——

Mr. Byron: Same objection.

Mr. Cuningham: ——'interference, a practice of [1190] nuisance applications to harass and delay the development of a competitive process; and litigation to benefit of monopolistic combination, which by bringing suits and appeals in many court circuits, may require an inventor to defend his rights at prohibitive expense.'

Does that correctly express your views?

Mr. Byron: Same objections.

A. Yes, sir."

Cross-Examination

By Mr. Byron:

"Q. There is a quotation on page 116 of your book, the book you wrote, 'Giant Business Threat to Democracy'——

Mr. Cuningham: I hand it to you.

Mr. Byron: I don't care to see it.

Q. And then you stated that Irving Potter, who invented the refrigerator in question, received little or nothing for his invention.

Mr. Cuningham: I object to that as being an incorrect quotation.

(Deposition of Theodore K. Quinn.)

Mr. Byron: You may quote it, if you desire. I am giving the sense of it.

Q. Did I give the sense of it?

Mr. Cuningham: It is your examination.

Mr. Byron: All right, then don't interfere.

A. Except that you refer to it as a refrigerator, but I [1191] thought of it as a principle.

Mr. Cuningham: That is the precise difference I had in mind.

Q. (By Mr. Byron): Well, in any event, you say, 'Who received little or nothing from his invention.' Now, what is the basis for that statement?

A. Just general information, and my whole statement there is as to general knowledge in the refrigeration industry.

Q. Where did you receive your knowledge on that point?

A. I suppose from many, many sources.

Q. Just name one source.

A. You mean, specifically, that he received nothing from it?

Mr. Byron: Yes.

A. Or a little from it?

Mr. Byron: Yes.

A. I think he told me that.

Q. You are certain of that?

A. Quite sure of that.

Q. When did he tell you that?

A. Oh, within the last five years. I tried to check all of those statements I made in my book as responsible authors try to do.

(Deposition of Theodore K. Quinn.)

Q. Well, in other words, you are taking his word for it, as his statement?

A. Yes, that and, as I say, being in the industry, which [1192] I was, you have an impression about what goes on, don't you know.

Q. There is talk, I know. But you say you know nothing about this industry since you left in January, 1936.

A. I wouldn't say I knew nothing about it, but I couldn't answer specifically about this.

Q. You know nothing about the General Electric machines?

A. No, I didn't say that. I couldn't identify a particular model."

"Q. You understand what I mean, don't you, when I am talking about this?

A. Well, I understood that you were charging me with absolving myself from all knowledge. I didn't mean to do that. I only mean to say with respect to that model that I couldn't identify it.

Q. What model, then, did the General Electric Company make after January, 1936?

A. Well, there again, they made various models, but from that point on, I don't know specifically.

Q. Well, then, you don't know the structure or operation of any of the General Electric refrigerators after you left?

A. Yes, substantially, that is right.

Q. Well, that is substantially what I said before.

(Deposition of Theodore K. Quinn.)

A. (Continued): I didn't so understand it. Perhaps it is [1193] my fault.

Q. What is the basis for your reaching your conclusion, if this is your conclusion, that large corporations have used the patent system, and that the individual inventor has no chance?

A. I have had a good deal of contact with inventors who have come to me with ideas while I was with the General Electric Company and afterwards, and I am always impressed—almost with a sense of pity—with their limited means, their devotion to an idea, to the exclusion sometimes of a source of livelihood for their families, and then I know, having been on the other side, what they have to deal with when they come to sell an idea, or a patent, to a large corporation. To them it may have been worth many, many years of devotion, but to the company who comes to buy them out, they very often will give the man $1,000 just to get rid of him, if anything, and then if he attempts some other alternative, such as to launch a business, he usually has no idea of what is involved in the organization of the business, in the production of the product that he has in mind. He is just an all-around, in my experience and judgment, pitiful creature.

Q. Well, haven't you found it to be a fact that many of these men who came to you to submit ideas to General Electric Corporation really had little, if any, invention to suggest to you, in many instances? [1194]

(Deposition of Theodore K. Quinn.)

A. I think that is undoubtedly a number of them, the larger portion of them, have ideas that are not meritorious. But given a number, there is always a percentage of them, I find, who do have merit, and that you afterwards see adopted by some of these companies that will not pay for it in the beginning.

Q. Is that a practice at General Electric Company?

A. I don't want to charge General Electric Company with being any worse or any better than any other big corporation. I think there goes with size an impersonality, an inhumanity, if you please, that doesn't exist where men deal intimately and closer with each other as principals.

Q. Well, then, you mean, as a result of that, that there is a wrongful appropriation of inventions by the General Electric Company, inventions of others?

A. Anyone with large capital and market power is in a position to take advantage.

Q. I say, does the General Electric Company do that?

A. We made a practice of getting the most we could for the least money, and when we were dealing with a man who couldn't organize a business of his own, to make his product, he was almost at the end of his rope when he came with us and was glad —in many cases about which I am familiar—was glad to take a very small compensation.

Q. What was your full period of time with the General Electric [1195] at the time you were there?

(Deposition of Theodore K. Quinn.)

A. Well, I started with the General Electric Company—let us see, it was in 1912. I was there for 24 years.

Q. And had General Electric Company during that entire period maintained a large Patent Department? A. Yes.

Q. And what was the function of that Patent Department?

A. Well, as is all Patent Departments, to screen such patents as were presented to the Company, to work out and present on behalf of the Company, applications as a result of work that was done by men within the Company, and to function generally as the name suggests.

Q. And when inventions were submitted from the outside or the General Electric Company observed developments, they saw to it that they made a patent investigation to find out whether or not there would be infringements of patents, did they not? A. Oh, yes.

Q. As a matter of fact, General Electric has always maintained a large corps of patent searchers in Washington, isn't that correct?

A. I don't know how large the force is in Washington, but we were represented there.

Q. How many patent lawyers were there in the Patent Department of General Electric Company at the time you were a Vice-President [1196] in 1930—from 1930 to 1936?

A. I don't recall exactly, but I imagine there were twenty.

(Deposition of Theodore K. Quinn.)

Q. If I told you that there were fifty, would you be surprised at that number?

A. No, it could have been fifty, but I don't think so. I have been in the Department and looked them over. I don't think there were fifty.

Q. Did you know that this very same Potter and the General Electric Company had litigation with respect to his original patent? A. No, sir.

Q. The reissue of which is now subject to this litigation? A. I did not know."

Redirect Examination

By Mr. Cuningham:

"Q. Based on your experience as a merchandiser of refrigerators, would you say that a two-temperature box, such as that illustrated in the Potter patent, reissue patent in suit, would command a substantially higher price to the purchasing public than the ordinary conventional box without the moist cold feature?

A. Well, the moist cold had an undoubted appeal as evidenced by the fact that we made several rather futile attempts to achieve it through such mediums as these pans and hydrators, and also by the fact that it has since been very widely adopted [1197] and is now in quite general use. I think the answer is in the evidence of what has happened—that the moist cold refrigerator has become acceptable and is now very widely in use.

Q. Is it now a standard article? A. Yes.

(Deposition of Theodore K. Quinn.)

Q. And so far as you know, is that standard article of commerce founded by the Potter organizations?

A. To the best of my knowledge, and I have so said and so written."

"Q. I call your attention to pages 16 and 17, either one or both of them, and ask you if you recognize that two-unit double-compartment box?

A. Oh, yes.

Q. Well, now, is that a product of the General Electric Company, to your knowledge?

A. Only as I see it announced here in this pamphlet.

Q. In about 1939?

A. The date here is 1939.

Q. Do you recall any earlier two-compartment box that was actually marketed by G.E.?

A. None except the one I mentioned a while ago, where we made a stab at it and abandoned it.

Q. That was a flop? A. Yes." [1198]

"Q. Can you give us any idea of what the ratio of cost to price would be with respect to these moist cold boxes which are now a standard article of commerce and the conventional dry cold box which is likewise a standard article of commerce?

A. I am afraid I don't know enough about that to give you an answer. I can tell you, generally, that the practice in the appliance business with respect to pricing is to multiply your factory costs by about two and one-half times, and I should as-

(Deposition of Theodore K. Quinn.)

sume that that same formula would apply to any product of any description. That is generally true."

(Whereupon proceedings herein were adjourned to Monday, November 28, 1955.) [1199]

Monday, November 28, 1955, 11:00 A.M.

proceedings herein were resumed pursuant to adjournment, as follows:

The Court: We just contacted Mr. Price. He thought we were convening at 1:00 o'clock. This demonstrates how the absence of one juror can cause a lot of confusion to a lot of people. Be sure to remember the hours.

I think that this might be a good time to complete the record. Go ahead.

Mr. Cheatham: May the record show that your Honor ordered that Plaintiff's Exhibit 19 and all of the patents listed therein, 19-A to 19-II, are in evidence.

The Court: Yes, I think that's right. It may be admitted, Mr. Cheatham.

(List of patents, previously marked for identification, were received in evidence as Plaintiff's Exhibits 19-A to 19-II, inclusive.)

Mr. Cheatham: May the record also show that it has been agreed between counsel for the parties that the various minor errors may be corrected in the testimony of Mr. Parker, and I want particularly to show now that on page 836 the patent

number thereon should be 2,636,228 in both instances.

Also may the record show that it has been [1200] stipulated between counsel that various physical exhibits which are listed as being in evidence on various pages are not listed in the index and that that may be corrected?

Mr. Cuningham: If your Honor please, that closes the plaintiff's prima facie case.

The Court: I think it's going to take about 15 minutes before Mr. Price is going to be here. I think under those circumstances it might be just as well if you would retire to the jury room where it is more comfortable for you, and we can take up some legal matters then.

Mr. Kolisch: Your Honor, I am wondering if you want at the commencement of the defendants' case for us to offer any of the exhibits which have not yet been received, defendants' exhibits which we are ready to offer now. Most of them have already been received.

The Court: Well, you can offer them. That would be a good idea, but I don't see why the jury has to be here while you are offering exhibits unless you want them here.

Mr. Kolisch: No.

The Court: All right. You may be excused.

(Whereupon the jury was excused and the following proceedings were had out of the presence of the jury:)

The Court: Go ahead and offer your exhibits.

In the first place, I think the record should show [1201] that the defendants have moved for a directed verdict on the grounds set forth in the written motion, which contains a file date of November 25th. At my suggestion the defendants have waived argument and I have denied the motion for a directed verdict because I assume that a similar motion will be made at the conclusion of all of the testimony.

Now, Mr. Kolisch, do you want to offer something?

Mr. Kolisch: Yes, your Honor. Defendants' Exhibit 110. These are all listed in the pretrial. Defendants' Exhibits 111, 112, 113, and 118.

Mr. Cuningham: Now, if your Honor please, there is objection to some of those. There is objection to 110 on the ground that like other patents in evidence it is not prior art. There is objection to 111 on the ground that that is not even prior to the date of inventions that have been established in plaintiff's case. There is no objection to 112 and 113.

The Court: 112 and 113 may be admitted.

(The documents, previously marked for identification, were received in evidence as follows: G. A. Gase and E. A. Seymour patent, March 15, 1955, as Defendants' Exhibit 112 and F. W. Wolf patent, December 16, 1919, as Defendants' Exhibit 113.)

Mr. Cuningham: On what—was 118 offered?

Mr. Ramsey: Yes. [1202]

Mr. Cuningham. Let me see what it is. Oh, if your Honor please, 118 was objected to strenuously before, and that is the later 1940 patent of Mr. Potter. It has no connection with the case whatsoever or with the plaintiff—it is not just a patent, it's the whole file wrapper. October 29, 1940—it can have no possible bearing on any issue.

The Court: Well, Mr. Byron at that time said that the file wrapper showed some admissions against interests.

Mr. Cuningham: Your Honor, I don't see how it is possible.

The Court: Well, I don't know either, but I haven't seen the file. I will have to take a look at it.

Mr. Cuningham: Well, could we just mark it for identification and you reserve a ruling?

The Court: I have already done that. Nobody showed me the part that is alleged to contain the admissions. What portion of the file wrapper contains the admissions?

Mr. Ramsey: Well, this file wrapper is a patent which was filed within six months of the patent—of the granting of the original patent; that is, the patent that matured in the reissue patent. It contains very similar language in its claims and in its disclosure to the patent in suit, and there is an interpretation in that patent of what the patentee, Potter, contended for words such as "within" and "nonfrosting coils," and a lot of the elements and the organizations that [1203] are the subject matter of the patent.

The Court: Is that what he himself contended?

Mr. Ramsey: He contended to the patent office in that regard.

Mr. Cuningham: Your Honor, I deny that. I think it's a contention in argument by his attorneys. It's unfair to admit this sort of thing for another reason, your Honor: It brings in the arguments pro and con of the patent office at a wholly later date. It could have nothing to do with any issue in the case, prior art or subsequent art.

The Court: Well, if Potter is making certain contentions and he puts an interpretation on words which are involved in this litigation I think it's admissible. But I would like to look at the file wrapper myself. I want to check that file wrapper.

Mr. Cuningham: I think Mr. Ramsey should point out the portions that your Honor asked him to.

The Court: All right. I wish he would.

Mr. Ramsey: Would you care to——

The Court: What about 110 and -11?

Mr. Ramsey: 110 is one of the file wrappers in this case, Lungard. It shows on the back of the patent as one of the patents relied on by the patent office itself as prior art.

Mr. Cuningham: That is true. [1204]

The Court: Well, it's admissible. It may be admitted.

(Lungard file wrapper, previously marked for identification, was received in evidence as Defendants' Exhibit 110.)

The Court: What is 111?

Mr. Ramsey: 111 is the Gibson patent, the reissue, 29,141, that was filed September 30th, 1930, the original of it was, and thus is prior in point of time to the filing date of the patent in suit.

Mr. Cuningham: It is not prior art, your Honor, and it is not prior in time to the invention date we have established.

The Court: What about that? Do you have to prove that Gibson was invented prior to the date of filing?

Mr. Ramsey: I think the presumption is that the filing date holds unless they can prove an earlier date. Whether they have or have not I don't know. That's only one of the purposes for this patent which shows the patent under which these defendants operate and under which they have a license.

The Court: All right. It will be admitted.

(Gibson Reissue Patent No. 29,141, September 30, 1930, previously marked for identification, was received in evidence as Defendants' Exhibit 111.)

Mr. Cuningham: May I get a little clarification? You say "under which the defendants operate." Now, is it the [1205] admission of the—Mr. Ramsey and the defendants here that the Gibson patent covers any of the accused structures?

Mr. Byron: No.

Mr. Cuningham: Well, then, how do you operate under a patent if you—if it doesn't correspond——

Mr. Ramsey: We secured a license on it.

Mr. Cuningham: All right. Your Honor, if they don't use that license on anything accused in this case I think it's wholly irrelevant, and for that reason I object to it.

The Court: All right. Your objection is noted. The exhibit is admitted.

Mr. Kolisch: There were two others, your Honor: 120-A and 120-B.

The Court: What are they?

Mr. Cuningham: If your Honor please, those are objected to.

The Court: I don't know what they are.

Mr. Kolisch: 120-A is a Potter trust agreement and 120-B is the Potter-Bronaugh letter.

The Court: Well, that goes to the question of title.

Mr. Cuningham: Title?

The Court: Isn't that right?

Mr. Ramsey: That is correct. I thought that the Court admitted them but the record does not show it.

Mr. Cuningham: No, your Honor, I thought the Court [1206] excluded them. They have nothing to do with legal title in this lawsuit as part of alleged clean hands. I have never been able to understand and certainly they are not competent. They haven't been proved in the case. They are not only irrelevant and immaterial but not proved, and I object to them.

Mr. Ramsey: If the Court please, the Court will remember that this went in with the Potter deposition and these are actual copies that Mr. Pot-

ter personally gave to counsel when his deposition was taken and testified that they are an outline of the plan under which the plaintiff corporation was formed, and upon which he operated.

Mr. Cuningham: Now, if your Honor please, that is not my understanding. The documents have been in the defendants' possession since 1951 and the deposition that they are mentioning is the deposition in a wholly different lawsuit not between the same parties, in a suit in New York.

Mr. Ramsey: If the Court please——

The Court: I didn't understand it that way. We came across that testimony, I believe, and there was a question as to whether the trust agreement was actually signed and you contended that you knew of your own knowledge that they weren't signed.

Mr. Cuningham: No, your Honor, I did not. I said that I had reason to believe that they weren't, and my position is [1207] that they haven't been proved to have been signed.

The Court: But the testimony of Mr. Potter was that this was the outline of the arrangement that they had with the trustees, is that correct?

Mr. Cuningham: That is not my understanding, your Honor.

The Court: Well, let's read the portion of the transcript that says that.

Mr. Cuningham: I don't know. I don't think it says it.

The Court: Is it the testimony in this case or in some other case?

Mr. Ramsey: Testimony in this case and you

will find it's already been written in. This subject came up and the Court will possibly remember that I offered these and I thought the record should indicate——

The Court: I thought I admitted them.

Mr. Ramsey: I did, too, but the record is silent.

The Court: All right. They may be admitted. Exception is allowed.

(The documents, previously marked for identification, were received in evidence as follows: Potter Trust Agreement, as Defendants' Exhibit 120-A, and Potter-Bronaugh letter as Defendants' Exhibit 120-B.)

The Court: Anything else? [1208]

Mr. Kolisch: I would like the clerk to check and see if the defendants now have offered and everything has been received in evidence with the exception of 103 and 103-A.

The Court: You want to do what?

Mr. Kolisch: I just want to see that we have everything in.

The Court: You check with the clerk.

We will take a short recess.

(Recess.) [1209]

The Court: Mr. Ramsey.

Mr. Ramsey: Call Mr. Muffly.

GLENN MUFFLY

a witness produced in behalf of Defendants, having been first duly sworn by the Court was examined and testified as follows:

Direct Examination

By Mr. Ramsey:

Q. Your name is Glenn Muffly?

A. Right.

Q. You told the Reporter that you——

Mr. Cuningham: If your Honor please, we, of course, have the hope of being able to admit Mr. Muffly's qualifications to a limited extent as an expert in his field. May I examine briefly on voir dire before doing so?

The Court: You are not satisfied that he has the qualifications?

Mr. Cuningham: Well, sir, I would like, for the purposes of the type of admissions—I think it will be a limited admission—I would like to have him answer two or three questions very briefly.

The Court: I think that under the circumstances—I do not know what field they want to qualify him in as an expert—that we ought to let him go ahead and first qualify him, and if at any time you are satisfied they will stop. [1210]

Mr. Cuningham: Your Honor, my purpose was to save time and to find out about certain matters that I am concerned to know about before making such a sweeping admission.

Mr. Byron: Let us not worry about saving the

(Testimony of Glenn Muffly.)

time in defendants' case. The plaintiff has taken a lot of time, and we will take less time.

Mr. Cuningham: Your Honor, I wonder if I might ask him, ask Mr. Muffly, for example, whether he is admitted in the Patent Office, whether he is a patent lawyer or a patent agent.

The Court: You will have all the opportunities in the world to interrogate him on the voir dire.

Mr. Ramsey: We will be very glad to stipulate that he is not and also stipulate he is not a lawyer, does not practice law. Is there anything else?

Mr. Cuningham: Yes, I would like to know whether, with the exception of the one case that I know about, he has testified in other patent suits on refrigeration.

The Court: What is the situation about that?

Mr. Cuningham: I would like to have Mr. Muffly answer. I think that would be the quickest way.

The Court: Have you testified in other cases?

The Witness: I have.

Q. (By Mr. Cuningham): For what clients, Mr. Muffly, what [1211] cases?

The Court: Well, Mr. Cuningham, you will have an opportunity to interrogate this witness. Please be seated. Go ahead and qualify him any way you want, Mr. Ramsey, unless Mr. Cuningham is willing to admit his qualifications.

Mr. Cuningham: Your Honor, I will admit that he is, as testified, a refrigeration engineer, but be-

(Testimony of Glenn Muffly.)

yond that I do not feel that I can admit his qualifications.

The Court: I am the one to make that determination as to whether he is qualified as an expert or not. I do not know the man's qualifications. I have told you before that when Mr. Byron admitted the qualifications of Mr. Parker that was all. Then there was no question about it. Now there seems to be a question, and in view of that fact we will permit Mr. Ramsey to make his own case.

Q. (By Mr. Ramsey): Will you tell me your occupation?

A. Consulting engineer in refrigeration and particularly electrical refrigeration.

Mr. Byron: Now, Mr. Muffly, you and I mumble to each other sometimes, but please speak up so that everybody can hear you.

The Witness: I will try to keep my voice up.

Q. (By Mr. Ramsey): Where do you have your office? A. In Springfield, Ohio.

Q. That is the same placee that you live? [1212]

A. Yes.

Q. What is your first experience in the field of household refrigeration?

A. First actual experience started in 1925.

Q. Would you please state with whom?

A. With the Copeland Products, Inc., a newly organized company that has just purchased the business of Ed Copeland who was making electric refrigerators in Flint, Michigan, and the plant was being moved to Detroit.

(Testimony of Glenn Muffly.)

Q. Are you familiar with the practical household refrigeration art as it existed at that time?

A. Very familiar with it.

Q. Would you please explain that to the jury, the state—state the state of that art, practical art.

Mr. Cuningham: Objection, your Honor.

The Court: Are you a graduate of any college?

The Witness: I am—I have attended a couple engineering colleges. I have no degrees, no honorary degrees even.

The Court: How many years did you go to engineering school, and which ones?

The Witness: I went to Iowa State College and to Armour Institute for a couple of years. I am mostly self-educated, rather a practical fellow than theoretical.

The Court: How long have you been in the field of refrigeration? [1213]

The Witness: Thirty years.

The Court: Since 1925? A. Since 1925.

The Court: Tell us the jobs that you have held and what you have done. Go ahead, Mr. Ramsey, qualify this witness. You have done it.

Mr. Ramsey: If the Court please, I was going to develop through this witness the state of the art from 1925, 1930, not qualify him as a patent expert, although I will because that will later develop.

The Court: Well, I think that the witness' qualifications should be established before any questions are propounded to him.

Mr. Ramsey: Very well.

(Testimony of Glenn Muffly.)

Q. In connection with your profession what societies do you belong to, Mr. Muffly?

A. I belong to the American Society of Refrigerating Engineers, the National Association of Professional Engineers, to the Ohio Society of Professional Engineers, to the Engineers Club of Dayton, to the Engineers Club of Springfield, to the Springfield Section of the Ohio Society, and have in the past belonged to other societies; for instance, the Society of Automotive Engineers I have belonged to for many years prior to my entry into refrigeration and overlapping with it some ten or fifteen years. [1214]

Q. Have you held offices in those societies or any of them?

A. I was national president of the American Society of Refrigerating Engineers for the year 1932.

Q. Are you a professional engineer so qualified in the State of Ohio?

A. Yes, I am a registered professional engineer in the State of Ohio.

Q. In connection with your profession in Springfield, Ohio, do you have any connection with patents?

A. Yes, a great deal.

Q. Would you please state what sort of files you keep?

A. I started compiling records of patents first for my own benefit, taking out patents, and this grew into quite an elaborate field, starting in 1929-30, and this field has grown now to a point that it

(Testimony of Glenn Muffly.)

represents a large part of my work, and I have what is generally recognized as the most complete cross-index file of refrigeration patents in the country.

Q. Will you state how many patents are contained therein for reference?

A. Something over a hundred thousand.

Q. Are those United States patents?

A. Most all United States patents; a few foreign patents.

Q. In connection with your work, who are your clients? [1215]

A. My clients originally were annual retainer clients I worked for regularly. At the present time I am only retained on special advance studies so that the list of clients is not constant from month to month. I have served about 50 or 60 different companies including most of the large companies. It is easier to say whom I have not served. I have not served the large electric companies of General Electric or Westinghouse.

Q. Is your practice limited to refrigeration?

A. Yes, my consulting work is.

Mr. Cuningham: If your Honor please, I do not think that is responsive, whom he has served. I would like to know what clients he now has. That is the question.

The Court: What clients have you served within the past two years?

The Witness: The parties here.

The Court: Admiral and Amana?

(Testimony of Glenn Muffly.)

The Witness: Yes.

Mr. Cuningham: This is just within the last two years, or how long have you served them, each of them?

The Court: Mr. Cuningham, why don't you wait until this witness has testified, please. You are going to have all the opportunity to interrogate him, but I think he ought to be able to answer the questions at least that I ask him.

The Witness: A part of this service is to [1216] companies who are licensed under some patents of mine, and that would include Seeger Corporation.

The Court: What do they manufacture?

The Witness: Seeger Company is a large manufacturer of refrigerators. They manufacture the Sears Roebuck refrigerator; the Frigidaire Division of General Motors; some companies that make parts of refrigerating equipment; the Hoover Company who are not manufacturers of refrigeration but are much interested in it. They are the vacuum sweeper manufacturers.

Q. (By Mr. Ramsey): Are those typical of your clients?

The Witness: That is typical of the——

Q. About how many patents, did I ask you about how many patents are reflected in your files?

A. About a hundred thousand.

The Court: Are they all refrigeration patents?

The Witness: No, not all, but predominantly refrigeration.

The Court: Over half of them?

(Testimony of Glenn Muffly.)

The Witness: Oh, 90 per cent, I would say.

Q. (By Mr. Ramsey): What is the remaining 10 per cent?

A. They are electric appliances, largely, and a few in the aircraft field, but they are mostly electric appliances, home appliances.

Q. Do they or do they not relate to, in some fashion, refrigeration? [1217]

A. Yes, they are other appliances that are commonly manufactured by the same companies that manufacture electric refrigerators.

Q. In connection with your work, do you have an opportunity to study patents relating to refrigeration?

A. Yes, my work has shifted in that direction in recent years.

Q. Do you understand claims of patents?

A. Yes.

Q. Do you analyze claims and apply them to other patents and to structures? A. Yes.

Q. Have you secured any patents in the refrigeration art? A. Yes, a great many.

Q. Do you or do you not write your own specifications before presenting them to your attorney for approval and criticism?

A. I write them myself, but we do not stop there. I give it to the attorney to work over and offer his suggestions.

Q. Do you draft your own claims for approval and criticism of your own attorney?

(Testimony of Glenn Muffly.)

A. Yes, I draft the claims and consider my attorney's suggestions finally, based on what we shall file.

Q. As I understand your testimony, you are not an attorney? A. I am not an attorney. [1218]

Q. In making up your cross-file and references therefor, do you read the claims?

A. Yes, I look at every patent before it goes into the file. [1219]

Q. (By Mr. Ramsey): Do you discuss claims with regard to your own application with examiners in the United States Patent Office?

A. Yes. I often visit the patent office to——

Q. Are you familiar with the patents in the United States Patent Office with any of the refrigerator art? A. Yes.

Q. Are you familiar with the classification of the patents in the United States Patent Office in the refrigeration art?

A. Yes. I have a copy of it in my own office as applied to refrigeration, but my own file—my own classification is the one I use for reference.

Q. I believe that you stated you are consulted by manufacturers in refrigeration art and their attorneys? A. Yes.

Q. And in connection with that work does your work entail the presence or absence of elements in combination claims? A. Yes, I ——

Q. Are you familiar with file wrappers——

A. Yes.

Q. ——of the United States Patents?

(Testimony of Glenn Muffly.)

A. Yes.

Q. Are you familiar with the reference cited in the file wrappers? A. Yes. [1220]

Q. Are you familiar with the theory of refrigeration? A. Yes.

Q. In 1925 what position did you hold with Copeland?

A. I came to Copeland from the automotive industry and was a special representative of the president of the company with the general job of helping to get the plant going.

Q. What position did you thereafter hold with Copeland?

A. I was very soon after that, after I organized the planning department of the plant, I went into engineering work to develop a new refrigerator.

Q. What position did you hold?

A. Well, I had no title at that time. I was merely development engineer, working on this job with no title. I became——

Q. Did you later acquire a title?

A. I became chief engineer within a few months.

Q. And what year was that?

A. That was in the year '26. I started in '25, late in the summer or early in the fall, and in '26, along the middle or the latter part of the year '26, I became a chief engineer of Copeland.

Mr. Ramsey: I submit to the Court Mr. Muffly's qualifications not only in the refrigeration art but also in the patent field as a patent expert.

(Testimony of Glenn Muffly.)

Mr. Cuningham: If your Honor please, may I ask him one question? [1221]

The Court: Go ahead.

Mr. Cuningham: Isn't it true, Mr. Muffly, this elaborate file that you have of 100,000 patents is used primarily by you on requests for patent searches of the prior art?

A. That's one of the main uses of it, yes.

Mr. Cuningham: Is that not the main use?

A. Originally it was just for my own use but now it is searches, and those searches are, of course, of prior art.

Mr. Cuningham: Now, for how many years has that been true, would you estimate?

A. When I started making such searches?

Mr. Cuningham: Yes; using your own file.

A. This has been a gradual shift from my work as consulting engineer to the work of patent expert and making these searches. The main part of that has come in the last 15 years.

Mr. Cuningham: Now, the searches are mostly the test of validity or the scope of an issued patent, are they not?

A. I do not pass on the validity of patents.

Mr. Cuningham: Well——

A. I merely make searches to see if these things are disclosed in the prior art. It is up to the client then to decide if he wants to negotiate or what he wants to do.

Mr. Cuningham: That's the principal part of this search work, is that correct?

(Testimony of Glenn Muffly.)

A. Oh, I would say the principal part concerns the manufacturer's [1222] plans to produce some new model in the future and I am working on things that the public won't see for two to five years—and make searches for the benefit of the manufacturer who is planning such things.

Mr. Cuningham: Well, do these remarks apply to your work for Amana in this case?

A. I have done such work for Amana. Right now it is just in connection with this case.

Mr. Cuningham: And Admiral, too?

A. Yes; and Admiral.

Mr. Cuningham: How long have you been retained by either or both of those, approximately?

A. Well, was first retained by each of them about the time they started in refrigeration, and it's been not on an annual retainer, as I said, but now and then. I have done work for Admiral maybe once or twice a year throughout that time and I was retained by Admdiral on an annual basis at the start when they were planning to get into the business.

Mr. Cuningham: What year was that?

A. I believe that was '44. I would have to——

Mr. Cuningham: Now, could you tell us a little bit about Amana when you were first retained, if you were, by them?

A. That was later, I believe. It was about the time that they brought out or contemplated bringing out a household [1223] refrigerator. They had previously built only freezers. And when they

(Testimony of Glenn Muffly.)

brought out a household refrigerator they consulted me on that.

Mr. Cuningham: About what year was that, if you recall?

A. I wouldn't be sure of that.

Mr. Cuningham: Well, as close as you can guess. It's not a question of being precisely accurate, but within a year or two.

A. Well, it was between '45 and '50; in there.

Mr. Cuningham: It was later than Admiral?

A. Yes, I think it was later than Admiral.

The Court: Mr. Cuningham——

Mr. Cuningham: Thank you.

The Court. ——this is not going to the man's qualifications. Are you satisfied with his qualifications now?

Mr. Cuningham: Not, your Honor, as a patent expert. I think as a refrigeration engineer, yes, but certainly not as a patent expert. He has not admitted and he is not recognized in any of the—incidentally, I noticed we are brothers in the Ohio society. That hasn't anything to do with engineering?

A. The Society of Ohio—Ohio Society of Professional Engineers? No, I am not a member of that.

Mr. Cuningham: You are not a member?

A. I mentioned that. I said the Ohio Society of Professional [1224] Engineers.

Mr. Cuningham: No. I thought you said we were fraternity brothers.

A. No, sir: I am sorry we are not.

(Testimony of Glenn Muffly.)

The Court: Do you advise the clients concerning the reach and scope of patents?

A. Yes. It's usually considering a design that they have and they consider producing this, and I merely produce, dig up for them and list certain patents, suggesting they look at this and that, and point out the ones that they should consider. Usually I give them quite a long list of patents with stars marking a dozen or two, and maybe emphasize by putting two stars on one I think they should study carefully. Sometimes a client negotiates a license or buys the patent or decides not to do it.

The Court: And what do you do besides giving them these references?

A. That's all. I help them sometimes with suggestions on design. But in recent years——

The Court: Do I understand that your main function is to design refrigerators that will be produced in two and three years by the big companies?

A. That's the general idea. I am working on things in the future and on my own inventions and patents, too.

The Court: And in that connection must you know the [1225] state of the art?

A. Oh, yes. Yes.

The Court: And must you also know what has been disclosed in prior patents?

A. Oh, yes. Yes, that's important.

The Court: And you give that type of advice to various refrigerator companies?

(Testimony of Glenn Muffly.)

A. Yes. Yes. But never legal advice because I am not——

Mr. Cuningham: We will admit Mr. Muffly does not practice law without a license—or patent law.

The Witness: No.

Mr. Cuningham: These questions are passed on by the lawyers, the patent people who are qualified, his clients, the scope of a patent, the validity.

The Court: What do you want to qualify Mr. Muffly as, a refrigeration expert and as a man who knows the state of the art at various times?

Mr. Ramsey: As a patent expert. As a refrigeration expert and as a patent expert.

Mr. Cuningham: That is not admitted. As a refrigeration expert, yes; not as a patent expert.

The Court: In connection with what? Do you want him to do what as a patent expert?

Mr. Ramsey: I believe that an expert occupies a little different position than a lawyer. We had in this court one [1226] case where a man is a lawyer and we admitted his qualifications as a patent expert. As I understand it, a patent expert is able to read patents, explain their theory and operation, the state of the prior art, the presence or absence of elements in claims, the meaning of elements as disclosed or not disclosed in the specification, but reach no legal conclusions.

Mr. Cuningham: Now, if your Honor please, I think the construction of the patent is probably that of the lawyer and probably that of the Court and not of——

(Testimony of Glenn Muffly.)

The Court: I assume, Mr. Cuningham, that a great portion of the people who are authorized to practice before the patent office are not lawyers. They are patent agents.

Mr. Cuningham: Now, if your Honor please, I think that's not correct, as I understand it.

The Court: Well, I said many men who are qualified to practice before the patent office are not lawyers.

Mr. Cuningham: Yes, your Honor. But this is not one of them.

The Court: I am going to permit Mr. Muffly to testify as an expert. If it should develop at a later time that he is not as well-qualified as his statement seems to indicate, I will change my ruling. But as of this time I think he is qualified.

Mr. Ramsey: Thank you. [1227]

Q. Mr. Muffly, we were chronologically going through your experience in the field of household refrigeration. Without repeating yourself, you were discussing your employment by Copeland Products, Inc., during the years 1925 to 1929, inclusive?

A. Right.

Q. At that time were you familiar with the practical art; that is, the state of the household refrigeration art in 1925?

A. Yes. I had been watching that industry for some 10 or 15 years, hoping it would become a production job as we in the automotive industry speak.

(Testimony of Glenn Muffly.)

Q. What is a "production job" as you use the word?

A. A thing is not in production unless you make a hundred or a few hundred a day or put it on something resembling a production line, like we built automobiles and like I had built automobiles up to 1925.

Q. Might I qualify on that? How long were you interested in the automotive and engine field and things relating to automobiles prior to 1925?

A. Well, starting in 1906 I had a job as assistant chief engineer of an automobile manufacturer, remained in that industry and finished——

Q. Well, I don't want to develop it. I only want you to explain what production problems you were referring to in the refrigeration field. [1228]

A. Oh, well, production covers a lot of things. It's the synchronizing of materials and the planning of plants and the equipment of machine tools and the bringing of thousands——

Mr. Ramsey: Wait just a moment until the siren quits.

The Court: I suggest that we confine our activities to the refrigeration field. I am not really interested and I don't think the jury is in how expert he is in the field of automotive engineering or production lines. We have got a problem, and since the beginning of this case I have been trying to hold all the attorneys down to the problem with which we are confronted.

Now, Mr. Muffly has been qualified as an expert

(Testimony of Glenn Muffly.)

in the refrigeration field. Ask him some questions about the refrigeration field. Let's get down to business.

Mr. Ramsey: These were only preparatory questions as to the state of the art in '25.

The Court: Ask him the questions.

Mr. Ramsey: Thank you.

Q. How many manufacturers were in production of household refrigeration in 1925, generally speaking?

A. There were only a couple or three that could be called in production. There was Frigidaire and Kelvinator and possibly Servel who had built three or four thousand machines.

Q. Now, what was the state of the household refrigeration in 1925 in gross annual figures? [1229]

A. That year the total production of the industry was something like 75,000 units. They were not necessarily refrigerators but systems that were installed in iceboxes and cabinets that they bought separately sometimes?

Q. Was this or was this not the time of conversion from putting mechanical refrigeration mechanism into iceboxes?

Mr. Cuningham: Objection, your Honor.

Mr. Ramsey: Is that what you were testifying to?

The Court: Objection sustained. This is your witness. You can't lead the witness.

Q. (By Mr. Ramsey): Well, will you please state what refrigeration systems are?

(Testimony of Glenn Muffly.)

A. Yes. The refrigeration system is the condensing unit, the low side, that's the brine tank, evaporator, cooling coil, we have been calling it various names here, and the necessary tubing, the thermostat to control it, and expansion valve to regulate the flow. Those were manufactured and shipped and installed in the field by servicemen. At that time that Copeland was being moved from Flint to Detroit and I started work with that organization, that new organization that had just bought it, there was no cabinet plant in connection with the Copeland in Detroit. There was not a cabinet plant in connection with the new one we were starting in Detroit.

We made the systems and bought the cabinets and [1230] we were just in the throes of putting this thing on the line or on the road, as you might say, getting assembly system together so we could build self-contained refrigerators, cabinet and all, and ship them out in one piece.

Q. So that we understand each other, you used the word "systems" as the refrigeration mechanism not within a cabinet and a "refrigerator" as a self-contained unit, is that correct?

A. Yes. A refrigerator might be merely a cabinet. But as we speak of an electric refrigerator, it is a cabinet and a system and self-contained.

Q. Yes. At that time what percentage of the industry was developing electric or mechanical refrigerators; that is, self-contained units?

A. A very small number of the companies that were trying to get started to make electric refrig-

(Testimony of Glenn Muffly.)

eration had any cabinet facilities. Only Frigidaire, Kelvinator, and Servel of that group.

Q. Now, in connection with your work with Copeland, what did you do with regard to building up electric refrigerators; that is, self-contained units?

A. Yes. One of my first assignments was to look at the refrigerator factories to select one that could make our cabinets, possibly that this company might acquire the company. I made quite an extended trip, came back to Detroit——

Mr. Byron: I think, Mr. Muffly, you can be much briefer [1231] on this. Don't give us a long story; just answer the question.

Mr. Cuningham: It seems to me one lawyer at a time——

Mr. Byron: All right. I will observe it.

The Court: All right.

The Witness: ...d we arranged to have cabinets made in Detroit.

Q. (By Mr. Ramsey): Were there any problems involved in question of cost in the refrigeration systems in putting them into self-contained units?

A. Oh, there was a great deal of work involved there because the first systems that were sold were very expensive and no one was making suitable cabinets, and there was a lot of work to be done there and the costs were way out of line, and that was where our automobile crowd came in to cut

(Testimony of Glenn Muffly.)

out some of the costs and get the thing down to a production basis.

Q. Now, discuss it in portion of size; that is, the size of the refrigeration systems.

Mr. Cuningham: Objection, your Honor. I don't know what he means by "it," discuss "it."

The Court: Are you talking about the size of the refrigeration systems?

Mr. Ramsey: Yes.

The Court: All right. Do you know what he is talking about, Mr. Muffly? [1232]

The Witness: Yes, I know what he is talking about.

The Court: Go ahead.

The Witness: The refrigeration industry, of course, had been built up——

Mr. Cuningham: Your Honor, I object. Let's have an answer to the question, "the size of the systems."

The Court: All right. Go ahead.

The Witness: ——by making large-size ammonia compressors and the refrigeration art started in the large machine and grew into the smaller field. Early in this century they were making small machines two or three horsepower or five horsepower. They thought that was very small. By the time I entered the household refrigerator field quarter horsepower was a small machine and still is a small machine, somewhat smaller than that in the household refrigerator usually.

Q. (By Mr. Ramsey): Now, discuss the prob-

(Testimony of Glenn Muffly.)

lem at the time that you entered the field with regard to the service life of such equipment.

A. Of household?

Q. In the household refrigerator field service life.

The Court: Service life.

Mr. Ramsey: Service life, yes.

The Witness: Service problems?

Q. Service problems.

A. The early refrigerators had quite a lot of trouble with [1233] shaft seals and belts, and they were always losing their gas. The serviceman had to go out and put in some more refrigerant. Service was a serious problem. At that time most of the refrigerators were of the open type belt-drive, with the trend soon developed in the direction of sealed units, which put the motor and compressor inside of the sealed housing and got rid of some service problems.

Q. Was there quite a bit of development prior to that time in the field of commercial refrigeration?

A. Yes. The commercial refrigeration is that intermediate step between the big, old, cold-storage and ice plants and the electric refrigerator of today. The first electric refrigerators were commercial machines. They went into butcher shops and florists and they became meat counters and ice cream cabinets and soda fountains and cooling systems of various types.

The bulk of the production before household refrigerators got under way was in the intermediate commercial field of small machines cooling such

(Testimony of Glenn Muffly.)

things as ice cream cabinets, soda fountains, meat counters, and commercial cabinets, some of them with front doors; just large refrigerators, some of them multiple-compartment refrigerators such as a meat counter that has, say, a glass top and sliding doors.

Mr. Cuningham: If your Honor please, I think the question has been answered. I object to any further answer. [1234]

The Court: Well, I think, Mr. Muffly, that all of the attorneys have joined in asking you to make your answers a little more concise and to the point and I think, Mr. Ramsey, that your question should be more direct. You ask a witness to discuss something and the witness doesn't know the outer limits of what he is supposed to discuss. So please ask him specific questions. [1235]

Mr. Ramsey: Thank you; I will try to do that.

Q. You spoke of counters and display cases. Were those in single compartment or multiple compartment?

A. Both were made, both types.

Q. Will you describe them, please?

Mr. Cuningham: Oh, if your Honor please, I object. I think he ought to be more specific than that.

The Court: I think it is specific enough; otherwise, it would be leading, so answer the question.

The Witness: The single ones were usually a counter showcase height, say four feet or so, and the upper part of it would have a glass front, prob-

(Testimony of Glenn Muffly.)

ably inclined, with sliding doors. That would have a tray or pan on which the product was set, and below that were the coils, cooling coils, the evaporator, and sometimes coils at the peak where the inclined front and the back and the top meet.

In the lower compartment, sometimes refrigerated and sometimes not, sometimes it was refrigerated to a lower temperature than the upper compartment, and one end would be separated off and cooled to a low temperature, and the other end of the lower space would be used for the condensing unit, the machinery compartment.

Q. Do I understand that is a multi-compartment, multi-temperature? A. Yes. [1236]

Q. Would you indicate the range of the temperatures in the two compartments?

A. The upper compartment would be anything from 35 to 50, depending on the product that was to be stored there, and the lower compartment would be below that and sometimes as low as 20 above, or if they stored ice cream it would go to zero or a little below.

Q. What sort of products were kept in the cooler of those two compartments, for example?

A. Well, ice cream was one that required a low temperature.

Q. Now what is the warmer of the two?

A. That would be meats that were not frozen. It would be general produce. The meats occupied an important position because they did not always refrigerate the leafy vegetables.

(Testimony of Glenn Muffly.)

Q. Was any of it made to control humidity, in most cases?

A. Yes, in the case of leafy vegetables it was important to have high humidity in that warmer compartment.

Q. In the state of the art at that time, and discussing now "know-how," do you know what the technical knowledge of the art was at that time?

A. Yes.

Q. What was the condition of that technical art with regard to the maintenance of temperatures?

Mr. Cuningham: Objection.

The Court: On what basis? [1237]

Mr. Cuningham: Your Honor, what was the nature of the technical art at that time, on the basis that it is too general, impossible for any individual to answer, so far as I know. I do not think Mr. Muffly is that omnipotent.

The Court: Are you objecting that they did not know as to the publicly-known state of the art?

Mr. Cuningham: Oh, no, sir; not at all. That never had occurred to me.

The Court: Well, as I understand it, Mr. Muffly has been qualified as an expert. He collects all these patents. He was in the field, and you are now talking about the year 1925, are you not?

Mr. Ramsey: That is correct.

The Court: That was the year he got into the field?

Mr. Ramsey: That is correct.

The Court: He has testified that for some time prior to that year he made an examination of the

(Testimony of Glenn Muffly.)

field to determine whether production lines could be installed.

Mr. Ramsey: That is correct.

The Court: I think that the witness can answer the question.

Mr. Cuningham: May we have the question?

(Pending question read.)

The Witness: There had been thermostats of many types in existence for many years. There were many to select from. [1238] They were too expensive. There were plenty of them.

Q. (By Mr. Ramsey): The question is the maintenance of temperatures.

A. Well, a thermostat is a device which stops and starts or turns it off and on and controls your temperature so that refrigerating systems had been controlled by thermostats for twenty years prior to my entry into the art.

Q. Is there any limit as to what range those thermostats could be set for?

A. No, I have had thermostats 40 below zero and hundreds of degrees above zero.

Q. Now, speaking of maintenance of temperatures in the refrigeration art, did the refrigeration art have the know-how at that stage, in 1925, to maintain temperatures?

Mr. Cuningham: Your Honor, objected to as calling for a conclusion.

The Court: He is an expert. That is the exception. He may ask the question. Go ahead.

(Testimony of Glenn Muffly.)

The Witness: I want to add a little to the question.

Mr. Cuningham: Objection.

The Court: Do not add anything to the question.

Mr. Ramsey: Would you like to have the question read?

A. The point is, it sounds too much like the one before. You are asking me about control of temperature.

Q. Yes. [1239]

Mr. Cuningham: May we have it read?

The Court: Are you not thinking of humid temperature, Mr. Ramsey?

Mr. Ramsey: Of what, your Honor?

The Court: You had talked about humidity, and then you went to control of temperatures without permitting the witness to answer the question before. Did you intend to do that?

Mr. Ramsey: Strike the question and ask with regard to combination, then, of the humidity and temperature.

The Witness: Oh, yes, yes; both were under control, and I would date that from the time that Willis Carrier took out his first patents, some of his first patents on humidity and temperature control which were in about 1910 to 1912.

Q. (By Mr. Cuningham): Are those refrigeration, the Carrier patents?

The Witness: Air conditioning.

Mr. Cuningham: Air conditioning. I move to strike as not responsive.

The Court: The motion will be allowed. This

(Testimony of Glenn Muffly.)

testimony may be admissable, but it not responsive.

Q. (By Mr. Ramsey): Then may I ask before the Court rules, are the air conditioning arts and refrigeration arts developmant arts?

A. Very close; they are inseparable.

The Court: Do they operate on the same [1240] theory?

The Witness: Yes.

Mr. Cuningham: Your Honor, I think we are now in the field of air conditioning. They are totally separate. This is not the same art as the refrigeration art.

Mr. Ramsey: The witness has testified to the contrary, Mr. Cuningham.

The Court: I think that is true. The motion will be disallowed. Go ahead.

Q. (By Mr. Ramsey): Now, considering that as the status of the practical art, are you familiar with the patent art as it existed in 1925?

A. Yes.

Q. Is that through this very elaborate system of cross-references that you maintain?

A. Both that and my personal experience in the use of it.

Q. You mentioned a number of about a hundred thousand patents in your present file, or upwards of that. What percentage of those patents would have been issued prior to 1925?

A. Less than half prior to 1925; probably half prior to 1930, in 1929 or '30.

Q. Something less than half?

(Testimony of Glenn Muffly.)

A. Something less than half prior to 1925, yes.

Q. Have you made an examination into the patent art to determine whether or not combined freezers and refrigerators [1241] were old in the patent art? A. They were.

Q. Co-counsel has suggested that that might not be a clear definition or question, and what I meant to ask you, Mr. Muffly, were household refrigerators having the freezing compartment and the cooling refrigerant compartment old in the art in 1925 as shown in these patents? A. Yes.

The Court: This is a good time to stop. Ladies and gentlemen, we are going to give you an hour and a half for lunch today. We will start in at 2:00 o'clock, and then we will go to about 4:30. You are now excused until 2:00 o'clock.

(Thereupon the jury retired for the noon recess at 12:30 o'clock, and the following proceedings were had after the jury had retired:)

The Court: Mr. Muffly, I know that you are a man of great experience and have had a lot of different experiences, and you can tell us a lot of interesting things, but we are here involved in a specific problem, and I wish that you would confine your answers to the questions that are propounded to you.

I think this remark I am making to you is particularly apropos to the questions Mr. Cuningham might ask you. [1242] When Mr. Cuningham asks a question, answer his question, and the same thing

(Testimony of Glenn Muffly.)

is true with Mr. Ramsey, although I do suggest, Mr. Ramsey, that you do not ask these shotgun questions. They are the type of questions that are difficult for most witnesses, particularly Mr. Muffly with his wealth of experience, so confine it to the questions you wish to ask.

Mr. Ramsey: Thank you, your Honor.

(Thereupon the trial was recessed until 2:00 o'clock p.m. of the same day.) [1243]

Afternoon Session

(At 2:00 o'clock p.m., the trial herein was resumed, pursuant to recess, and the following proceedings were had herein:)

GLENN MUFFLY

thereupon resumed the stand as a witness in behalf of Defendants and was further examined and testified as follows:

Direct Examination
(Continued)

By Mr. Ramsey:

Q. At the noon recess we were talking about the structure of these display cases that you say that were prior to 1925. Do you remember the details of those cases? A. In general.

Q. May I ask you whether—consider the following items. Were they inclosed in the cabinet?

A. Yes.

(Testimony of Glenn Muffly.)

Q. Did it have a cooling compartment?

A. Yes.

Q. Did it have a freezing compartment?

A. Yes.

Q. Did it have an insulation between the freezing and the cooling compartments? A. Yes.

Q. Did it have air in the cooling [1244] compartment? A. Yes.

Q. Was that air held at an average stable temperature, held at about 40 degrees Fahrenheit?

A. Yes.

Q. Held with a humidity relative value of at least 132 degrees F.? A. Yes.

Q. Did it have air in the freezing compartment?

A. Yes.

Q. Was that air held at a temperature well below 32 degrees F? A. Yes.

Q. Did it have a cooling coil in the cooling compartment? A. Yes.

Q. Did it have a freezing coil in the freezing compartment? A. Yes.

Q. Did it have a volatile refrigerant?

A. Yes.

Q. Did it have a single motor compressor condenser system? A. Yes.

Q. Did it have a thermostat in it? A. Yes.

Q. Was that thermostat responsive to the temperature of one of the compartments controlling the operation of said motor compressor condenser [1245] unit? A. It was.

The Court: I did not hear that last answer.

(Testimony of Glenn Muffly.)

The Witness: I said it was.

Q. (By Mr. Ramsey): Do you remember the names of the make or makes of those cabinets?

A. There were Nizer, Frigidaire, Liquid Carbonic, McCray, a number of manufacturers of cabinets and systems.

Q. Was a cabinet a refrigerator? A. Yes.

The Court: Is it your testimony that all of these various manufacturers had refrigerators containing all these elements?

A. There were a number who sold them. It was not always the same manufacturer who made the cabinet and made the system.

The Court: Assume that they were assembled.

The Witness: Yes; one bought a system from Frigidaire, say, put it into a McCray cabinet or a Liquid Carbonic.

The Court: Then the cabinet, as assembled, had all these elements in it?

The Witness: Had them all in, and it was sold as a unit.

The Court: That is all I wanted to know.

Q. (By Mr. Ramsey): Where did you see these cabinets?

A. Saw them in places of business in use. [1246]

Q. For example?

A. In grocers, butcher shops, in places that dealt in foods, restaurants, soda fountains, drug-stores, commercial use, commercial places of business.

(Testimony of Glenn Muffly.)

Q. In what cities did you see them in?

A. Largely around Chicago and in the Midwest.

Q. You were there at that time? A. Yes.

Q. Going to your experience from 1925 to 1929 when you were at Copeland. A. Yes.

Q. While you were there, what efforts did you make, if any, to make a household refrigerator having those elements?

A. I started early in 1926 to build such a refrigerator, and did build one model, and due to the fact that the management did not think they could sell so expensive a refrigerator I had to shelve that and concentrate on the night-and-day job of designing one they did produce and put on the market the 1st of July, 1926.

Q. Was there only one made during your employment in Copeland?

A. No, that was the first one. After this Copeland model that was put into production had gotten smoothly running into production, I went back to the development of a two-temperature cabinet and built three or four more. [1247]

Q. Did each of those include the elements that I noted in connection with the display cases?

A. A couple of them did.

Q. When was the last one made?

A. In 1929.

Q. What time in 1929?

A. Finished in the summer of 1929.

Q. Let us consider next the file wrapper of the original patent that is Defendants' Exhibit——

(Testimony of Glenn Muffly.)

The Court: You mean the original Bronaugh-Potter patent?

Mr. Ramsey: Of the original, yes, Defendants' Exhibit 101. Would you please hand that to the witness?

Mr. Cuningham: I object.

The Court: On what ground, Mr. Cuningham?

Mr. Cuningham: Well, if your Honor please, I can see no purpose in going into this file wrapper. It is complete in and of itself. It proves by itself anything that can ever be said about it. It contains the arguments of the Bronaugh and Potter attorneys. It contains the actions of the skilled experts in the Patent Office. Certainly there is nothing that is needed from this. Whatever Mr. Muffly, who had nothing whatsoever to do with it and who has not been qualified to have anything to do with it, he could add nothing. It would be much more relevant to have some witness here from the Patent Office, but the whole thing is all [1248] in, in black and white. You cannot change it. It is no more, no less, and there seems no reason to me to have any questions about it.

The Court: Mr. Cuningham, we permitted Mr. Parker to discuss the reach of the claims and to describe the patent in the reissue patent, and that is one of the things that is commonly done in patent cases, is to have a patent expert explain the technical aspects of the patent and the history thereof.

Mr. Cuningham: I think I did not make myself clear, your Honor. This is simply the papers back

(Testimony of Glenn Muffly.)

and fort', in the Patent Office, and now I think they are complete and speak for themselves, and there is nothing——

The Court: You might be right, but Mr. Ramsey has not asked a question yet.

Mr. Ramsey: I wonder whether we might have the large exhibit on the smaller easel, 16-A, before the jury, and whether we might have the blackboard so that the witness can show the jury exactly the purport of his testimony that is to follow.

(Items referred to brought before the jury.)

Q. (By Mr. Ramsey): Mr. Muffly, Exhibit 16-A is a reproduction and a large reproduction of Patent No. 2,056,165, the drawing of it, and also of the patent in suit. Do you understand the operation of that refrigerator? [1249]

A. I do.

Q. I wonder if you would step to the blackboard and would show how the structure operates because sometimes a drawing is a little difficult to read.

(Witness leaves witness stand and steps to the blackboard.)

The Witness: This is the front view of the refrigerator sawed off so we can look into the compartments. This is the view you would get looking at the same refrigerator from the right-hand side, and this line that runs down through here, broken line, shows there the refrigerator was sawed off to make this view.

(Testimony of Glenn Muffly.)

Mr. Byron: Figures 1 and 2 are you talking about?

The Witness: Figure 2, at the right the line, broken line 1-1 which is the section to show where Figure 1 was taken as if we stood here and looked at this refrigerator sawed off on that line. Most of what is to be seen could be seen in Figure 1, the front view, but since some of these parts are small and they are partially hidden and there is dotted lines, insulation, I will sketch roughly (sketching on blackboard) the Figure 1 and add the parts as I come to them.

This rectangle is the outside of the cabinet, and in the lower compartment you see a horizontal line below the insulation shown in section, and down here is [1250] the machinery compartment. In that compartment we have a compressor 15. Now, I am not going to reproduce the drawing. I am just going to make an outline. (Draws on blackboard). That is the compressor 15. The compressor is simply a pump and pumps gas, a vapor. That pump discharges into the condenser which we see in the patent drawing behind the compressor, but I am putting the condenser represented merely by some loops of tubing, and I am putting the condenser to the right of the compressor so we can see it, and that is numbered 18.

Now, the condenser at its bottom shows a tube and a dotted line which represents a tube that runs into this cylindrical receiver which is merely a drum, a container to hold the—that runs into the

(Testimony of Glenn Muffly.)

top of the container, and from the bottom of that container there is another pipe running from the receiver 17, there is a tube which runs up into the refrigerator. Now the main receiver is self-explanatory. It receives the condensed refrigerant from the condenser. Our compressor pumps the gas under high pressure into the condenser tubing, and due to the high pressure and the fact that air is blown across it this liquefies, and liquid refrigerant runs over into this drum 17 that we call a receiver (drawing on blackboard).

Now, the refrigerator proper has insulated walls, and within those insulated walls are two compartments bounded [1251] by what we call a liner, the metallic liner, usually sheet steel, porcelain enamel especially in any refrigerator. [1252]

This tube that leads from the bottom of the receiver 17 is spoken of as the liquid line because it carries liquid refrigerant up through the insulation to a small recess in the insulation. In that recess there is a device marked 23, and that is called an expansion valve. I'll put my numeral 23 where it's not in the way because from this expansion valve 23 there is a tube that enters this compartment (indicating) and drops down.

I have put the expansion valve in the right-hand side merely so we can see it in this view. In this view (indicating) it says "23" and points but you can't see what it points to. In this view you can see the expansion valve 23 and there is a little

(Testimony of Glenn Muffly.)

recess to hold it. That recess is behind the brine tank, this assembly (indicating), so you couldn't see it in this view, so I am putting it from here (indicating) over there (indicating) so you can see it.

From this expansion valve a pipe comes over as shown by the dotted line (indicating), down across and back and forth in that manner.

Now, in tracing this system thus far we have compressed the refrigerant gas in the condenser 18. That has liquefied, turned the gas into liquid by condensing it in what we call the condenser. We have accumulated, just saved up some of the liquid in the accumulator or receiver.

We take from the bottom of this a small [1253] tube carrying liquid, that liquid is filtered to the high compression of the condenser and the liquid goes up the compression valve at which point the pressure is changed to about five pounds per square inch, whereas it was on the order of 125 pounds per square inch in the condenser, the receiver, and the liquid line.

So now we have refrigerant liquid at about five pounds gauge pressure flowing into this tube which surrounds a small chamber that is marked 12, and that is the freezer.

In addition there are some still smaller sleeves to receive ice trays and those are numbered 19. Now, this coil that I have just drawn—expansion coil—is No. 22. That is the freezing refrigerant coil or evaporator or expander—it's called various things. This coil is within a brine tank so we have

(Testimony of Glenn Muffly.)

a wall here that is a metal wall and in and around the tube and around these sleeves, including the 12, which is the largest one, there is brine.

Now, the compartment at the left of this compartment 13 is called a frozen food storage compartment or it's referred to as being around 20 degrees. That is cooled by contact of air with this brine tank. The brine within the tank is cooled by the coil 22, in which the refrigerant is evaporating, so that we have at the outlet of this a mixture of vapor and liquid refrigerant.

I will come back to this expansion valve [1254] and how that can be adjusted to vary the operation.

Now, this tube that leaves the freezing coil 22 goes up the back of the box or through the insulation and reaches this point up here behind that control 31, but it doesn't connect with the control in any way. It comes up through the insulation and connects directly across through this coil 25, as we see above. So we will bring this tube in to the upper compartment. That is identified as 14. And we will connect it to this coil 25.

Now, the coil 25 is connected at its outlet back to the inlet side of the compressor. In the drawing it shows it coming down through the insulation at the right-hand side. We have to follow the arrowheads and trace it across over to the compressor. Since it will be easier to trace the path of this I will bring that tube down the left-hand side.

Now, understand, it makes no difference where we take it to get it out of the way. That is merely

(Testimony of Glenn Muffly.)

the conduit that brings the vapor back to the compressor to be recompressed, and I am bringing it in the top of the compressor which is an ordinary normal type of compressor rather than the rather peculiar shaped one that is in the drawing. But this compressor is, as I say, a pump. It has a piston. It could have a rotary piston, but usually is the common reciprocating-type piston. [1255]

That piston on its downstroke draws gas from this suction line and on its upstroke it pushes that gas under high pressure over into the condenser tube. This arrow is to show the direction of flow and I will put an arrow on the suction tube that leads from the evaporator or through the coil 25 back to the suction side of the compressor.

Now, that completes the refrigerant circuit of which the high pressure or condenser condensing phase starts at the outlet of it as the pressure goes through the condenser—no—through the expansion valve, and at that point we allow the refrigerant to expand. The expansion valve is a pressure-reducing valve that opens whenever the pressure in this coil falls below, say, five pounds, and it closes when it gets above it and maintains a standard operating condition pressure within that coil. That valve is adjustable so that we can change that pressure to suit the operation we want.

Now, the 100-pound pressure—or, 125-pound or so pressure refrigerant liquid reaches the valve and leaves it at five or ten pounds, whatever we set that to. So having taken the pressure off of this liquid,

(Testimony of Glenn Muffly.)

it is free to evaporate, hence we call this an evaporator coil. It expands in evaporation so we sometimes call it an expansion coil. In evaporating it absorbs heat from the brine around the tube and from these sleeves in which you put the ice trays and this larger sleeve, that is called the [1256] freezer.

If that brine has absorbed all of the latent heat of this liquid refrigerant and converted it all into vapor, we would have vapor passing up through this tube and into the top of the expansion coil 25 or cooling coil in the warmer compartment.

Q. (By Mr. Ramsey): Pardon me, Mr. Muffly.

A. Yes.

Q. Looking at 16-A, does it go into the top or does it go into the bottom of the coil 25?

A. It goes into the top, I believe. Wait a minute.

Q. I don't know if it makes any difference.

A. No, it doesn't make any difference, and it does go in the bottom. I will make it go in the bottom so it will be more—it's a matter of designers' choice. It could be done either way. We had it going in the bottom here and here in the top—or in the bottom up here. Thank you.

Q. I may have interrupted your train of thought. You were saying what the refrigerant does in the two coils.

A. Yes. Assuming first that the refrigerant had evaporated entirely in the coil 22, then we would have cold refrigerant vapor in this tube. That cold

(Testimony of Glenn Muffly.)

vapor would, of course, cool this coil but we would have used most of our refrigerating effect up down here in this brine tank, and the vapor would warm up a bit passing through this compartment in which the air is supposed to be about 40 degrees. [1257]

Mr. Byron: Will you please give a number, Mr. Muffly?

The Witness: In compartment 14. Pardon me.

Q. (By Mr. Ramsey): In the coil?

A. And the coil 25, this warms up approaching the temperature of the air in the compartment 14, and this vapor then flows back to the compressor at a somewhat warmer temperature than it had in the coil, but still on the cool side. But when it is compressed the act of compressing makes that vapor hot as well as under high pressure. So we discharge hot high-pressure vapor into the top of the condenser 18.

Q. That completes the cycle?

A. That completes the cycle.

I haven't put the thermostat in here. Now, that is numbered 31. I didn't draw the motor down here that drives the compressor, but you can assume there is a motor.

Q. What number is given to it?

A. The motor is numbered 16. We can——

Q. Don't bother.

A. Over here there would be a belt to drive the compressor 15 as we see in Figure 1 of the patent drawing. We see the motor 16 at the right and a belt drive over to a pulley behind the compressor 15.

(Testimony of Glenn Muffly.)

Now, to control that motor I had better indicate the motor. There are two wires, of course, come to it from your power source, and one of those wires has to be connected [1258] up and through this thermostat which is really a switch. This stops and starts this motor. So in the thermostat 31 it gets down to the temperature that is desired of the air in the compartment 14, this thermostat opens a switch and stops the motor so the compressor stops and the idle cycle of gradually warming up starts.

Q. Is this a thermostat like a thermostat in a furnace as in a person's home?

A. Yes, that is the same thing except it operates at a different temperature range. If you merely adjust this high enough and then reverse the switch so it would turn on when you get cold instead of turning on when you get warm it would be a suitable thermostat to put on a wall of the house to run the oil burner. This is a cooling thermostat, and the difference between this and a heating thermostat is merely the range of temperature and whether it opens or closes.

Q. I believe that you first made an assumption that all of the liquid was evaporated in the coil 22 and only vapor passed from 22 to 25. Was that——

A. Yes. Yes. And that would be the condition when this system was started up warm, the first time you started it it would no doubt do that and the brine being warm and this compartment being warm, the refrigerant would evaporate very rapidly in the coil 22, and there would be no liquid flow

(Testimony of Glenn Muffly.)

through to cool the coil 25, and it would have only the [1259] cooling effect of a little vapor. That wouldn't be enough so in actual operation there must be liquid remaining in the tube—a mixture of liquid and vapor passing up and into the coil.

Mr. Byron: What is the number of that coil?

The Witness: 25. The liquid would be flowing upwardly from the coil 22 to the coil 25, so some of the liquid would have to evaporate up here within the coil—that is within the compartment 14. And that is necessary in order to have enough cooling effect to cool the compartment 14 because——

Q. (By Mr. Ramsey): May I interrupt you? Now, explaining that portion of the patent in suit appearing in Column 5, Lines 7 to 12, which reads: "The refrigerant will be completely vaporized in coil 22 until the temperatures of the compartments near said minima, when some of the refrigerant will reach the coil 25 in liquid form, and, by vaporizing therein, will cool compartment 14." [1260]

A. Correct, yes. I am reading one which is said in almost the same way.

Now, I was just starting to explain that during that period when all of the evaporation occurred in the coil 22 we have used up practically all of the cooling effect of the refrigerant which is very largely latent heat. It is called evaporative refrigerant. It does its cooling by the act of evaporating, thereby taking up heat. It is that latent heat, the evaporation of the refrigerant which boils at 8 degrees. It boils at a very low temperature. Don't let

(Testimony of Glenn Muffly.)

the word "boil" lead you astray. It is boiling at about 8 degrees below zero, and until this gets cooled down, the brine tank containing the coil 22 is cooled down to a point, that is, not all of the liquid must evaporate in that coil, we will have only vapor, and as long as this is pulled down then we will have liquid flowing through, through coil 25 to evaporate there, and the assumption is that it gets all evaporated, it leaves gas down from the compressor because we want only vapor going back through the compressor.

Now, the temperature of this coil 22 is very positively tied to the pressure at which the refrigerant boils. It happens that the refrigerant in common use, most of the refrigerators on the market use a refrigerant called F-12 for short. That refrigerant boils at about 20 or 22 [1261] degrees below zero, if you had it at atmosphere, and at this particular pressure it boils at 8 degrees below zero, so this vapor and liquid mixture, as long as there is vapor located in that tube the temperature of that coil will be that 8 degrees below zero.

Q. Might I ask you, Mr. Muffly, are you familiar with the refrigerant system in the Anderson patent? A. Yes.

Q. I wonder if we could have the Anderson patent put up there.

(Document presented.)

Without going through a long explanation of the refrigeration circuit and the effects and limiting

(Testimony of Glenn Muffly.)

factors, would you or would you not say that the same system is shown in Anderson?

A. Yes, that is the same system.

Q. Is that 16-B you are pointing at now? That is on the top, I believe.

A. Exhibit 16-B.

Q. Does that system, as exemplified in Anderson, have the parts possibly shown in different conformation?

A. Yes, I can trace it very quickly. The expansion valve 33 expands into the freezing coil 34. It goes up into the coil 40 which is in the cooling compartment, and from that it comes back. [1262]

Q. Is the cooling compartment 6?

A. Cooling compartment 6. It passed first through the coil that is in the freezing compartment 7 and went up to the upper compartment and through the expansion coil 40 which is on the wall on the inside of the compartment 6, thereby cooling that compartment, and at its outlet end it goes down to the compressor which is back behind the motor 25. Again, it goes over through the expansion valve.

Q. That is completing the circuit?

A. Completing the circuit. The expansion valve 33 corresponds to the expansion valve 23 of the patent in suit. The evaporator coil 34 corresponds to the evaporator coil 22 of the patent in suit. The cooling coil 40 corresponds to the cooling coil 25 in the patent in suit. The compressor 20 corresponds—

(Testimony of Glenn Muffly.)

which is behind the motor 25—corresponds to the compressor 15 of the patent in suit, which has the motor shown off to the side as 16, and the thermostat 31 is in the Anderson patent, Exhibit 16-B, in the specification and is located on the vertical dividing member between the two front doors, so it is in the compartment 6, and it stops and starts the motor 25 just as the thermostat 31 stops and starts the motor 16 that drives the compressor 15 in the Potter patent.

Q. Taking up this question of the necessity of having liquid refrigerant in the cooling coils of these two, does [1263] or does not the same situation hold? A. In Anderson as in Potter?

Q. As in Potter.

A. The same situation, there must be liquid refrigerant flow entirely through the coil 34 and up through coil 40 in order to cool the compartment 6 of Anderson.

Q. Thank you.

I wonder with that explanation and that setting we might go to the file wrapper. Why don't you sit down, Mr. Muffly. We have this before us.

(Witness returns to the witness stand.)

The Court: May I ask what was the purpose of this whole description, just to describe the system?

Mr. Ramsey: Partly that, if the Court please, just so that the jury, being not refrigerating engineers, would know exactly how it works, but the

(Testimony of Glenn Muffly.)

particular point that is to be emphasized is that, as we find in this file wrapper, Anderson was the principal reference against the allowance of the claims and Anderson—I mean Potter—through his attorney represented to the Examiner that Potter differed from Anderson in tha[t] Anderson had liquid refrigerant in the coil, in the cooling coil, and that made it different, and secured the allowance of the claims over the representation, while even in his own patent right in the body of his specification he contends otherwise, and we will point that [1264] out in the file wrapper.

The Court: Very well; give Mr. Muffly the file wrapper.

Q. (By Mr. Ramsey): Would you explain to the jury the nature of a file wrapper?

A. A file wrapper is really the file and contents, and it acquired that name because it is done up in a package and called a file wrapper. It really is all the correspondence starting with the application of the inventor for the patent. He has to furnish a drawing and a description called a specification and certain paragraphs that are called claims to point out what he claims is his invention. This is the start of the file wrapper.

The next paper is usually an action from the Patent Office probably rejecting some or all of the claims, and so on, the correspondence goes back and forth between the attorneys and the Examiner in the Patent Office until some conclusion is reached: he gets the patent or he doesn't, and after the pat-

(Testimony of Glenn Muffly.)

ent issues this becomes public. Anyone may obtain a copy or go to the Patent Office and read it. Until the patent issues, this is secret, this is secret in the Patent Office.

Q. In other words, that is the history of the proceedings in the Patent Office?

A. Correct. [1265]

Q. I wonder if the witness might be handed Defendants' Exhibit 114-M which is a soft paper copy of the original patent. You will remember that as a soft paper copy.

A. I think I have one here. It is 2,056,165.

Mr. Ramsey: That is correct.

The Court: Here is a soft copy.

Mr. Ramsey: The other was marked, and I have a definite reason why I want to show that exact one, show the marked one if we have it available. Let us pass it, and we will come back when that copy is found.

Q. Mr. Muffly, have you read the claims in the patent in suit? A. I have.

Q. Have you read the specifications of both the original and the reissue patent in suit?

A. I have.

Q. You have Defendants' Exhibit 114-M?

A. 114-M is a soft copy to a reissue patent, and I am looking at the file wrapper of the original patent.

Q. Would the same specification hold?

Mr. Cuningham: If your Honor please, I ob-

(Testimony of Glenn Muffly.)

ject. What does that mean, with the same specification—are they the same?

Q. (By Mr. Ramsey): Are they the same?

The Witness: The two specifications are the same, with [1266] minute differences, the original patent and the reissue.

Q. What does the Exhibit 114-M show with regard to additions to the specifications at some time represented by the file wrapper?

A. This shows—which is also in the file wrapper—that a considerable part, over half I would say or approximately half of the specification was added by insertion on January 29, 1934, which is nearly three years later, two-plus years later than the filing.

Q. What did that replace, about how many lines?

A. That replaced the words which were canceled. I will read the canceled words.

Q. Would you tell us? That would give us the picture.

A. "The relation of the various compartments may, of course, be varied. It is important only that the food storage or cooling compartment be thermally insulated as fully as practical from the freezing and cold storage compartments in order that there may be no transfer of heat between same other than that which passes through the expansion line itself."

Mr. Cuningham: May I ask from where he is reading? I have not found it.

(Testimony of Glenn Muffly.)

The Court: I have not found it either. Are you reading from the reissue?

The Witness: I am reading from the words that were [1267] canceled in the original, but it is not in the printed copy here. It is in this file wrapper here.

Mr. Cuningham: Where?

The Court: What page?

Mr. Cheatham: Your Honor, if you please, you will remember there was quite a bit of discussion about this Exhibit 114-M, and this is what we were handed, and I see other things in the exhibit which is officially before the Court. I would like to see what 114 is officially.

The Court: What page of the file wrapper?

Mr. Ramsey: 48.

Mr. Cuningham: If your Honor please, I see this here, this copy, this original marked exhibit, that did not appear in the copy furnished us by the defendants, quite a lot of things.

Mr. Ramsey: What?

The Court: What?

Mr. Cuningham: Well, this stapled on here, pasted on here, the markings do not seem to me to correspond, and there is a legend in the margin. May we have a look at this before any further questions are asked?

The Court: You may look at it.

Mr. Ramsey: The original exhibits have been in the courtroom several weeks.

The Witness: I believe I have found the—Page

(Testimony of Glenn Muffly.)

48 of [1268] file wrapper is what we are looking for.

The Court: Is that the portion that was deleted?

The Witness: That is mostly a portion added. First some lines are canceled, and then a lot is added, and an addition, the addition goes from Page 48——

Q. (By Mr. Ramsey): The original specification and the part deleted is shown in the file wrapper, Page 6?

A. Yes; here is the part deleted on the relation of the various compartments down to compartments 12 and 13, respectively. It is on Lines 18 to 24 of Page 6 of the file wrapper.

Mr. Cuningham: We have found it, your Honor.

The Court: Do you see it?

Mr. Cuningham: Yes, but it is not in the exhibit as given us, copy of the exhibit. I have not checked the rest of those.

Mr. Ramsey: If counsel will remember, we could not find that, and you asked me what 114-M is, and I said it is only a soft paper copy and that we marked the portion that was deleted and the portion that was added, and I said that the part that was deleted was applied over it, and there was a mark on the margin showing the substitution, showing what was substituted for what.

Mr. Cheatham: I would not like to argue, but I do not remember that. [1269]

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No. 15057

United States
Court of Appeals
for the Ninth Circuit

MOIST COLD REFRIGERATOR CO., INC., a Corporation,

Appellant,

vs.

LOU JOHNSON CO., INC., a Corporation; MEIER & FRANK COMPANY, INC., a Corporation; ADMIRAL CORPORATION, a Corporation, and AMANA REFRIGERATION, INC., a Corporation,

Appellees.

Transcript of Record

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In Four Volumes

Volume IV
(Pages 1205 to 1573)

Appeal from the United States District Court for the District of Oregon

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Appeal from the United States District Court for the District of Oregon

Phillips & Van Orden Co., 870 Brannan Street, San Francisco, Calif.—6-29-56

(Testimony of Glenn Muffly.)

The Court: Very well. In other words, the portion that was deleted appearing on Page 6 of the file wrapper of the original patent is shown on a soft copy of 114-M.

Mr. Ramsey: That is correct.

The Court: All right. Let us start over again because no one remembers what you did.

Q. (By Mr. Ramsey): Would you identify on the soft paper copy that portion that was added, by column and by line?

Mr. Cuningham: Oh, if your Honor please, I object. This is all in the record. It is in that file wrapper. That is in evidence here. It can serve no purpose to duplicate it over and over again this way.

The Court: All right; go ahead. I do not think that the jury wants to go through the entire file wrapper to find out these various things. This is the simplest and quickest way to handle it.

The Witness: The typewritten insert that is pasted at the left of Column 3 in the soft paper copy of Reissue Patent 23058, Defendants' Exhibit 114-M, coincides with the wording which appears in the file wrapper record on Page 6 starting at Line 18 and finishing in Line 24.

Q. (By Mr. Ramsey): Would you identify in the reissue patent the part that was added?

A. The part that was added by the amendment filed July 29, 1934, in the file wrapper starts on Page 48, which is the [1270] longest and the last paragraph on Page 48, continues through Pages 49,

(Testimony of Glenn Muffly.)

50, 51, and ends on Page 52 of the file wrapper in the sixth line from the top. [1271]

Q. (By Mr. Ramsey): Now, will you locate that on the patent in suit?

A. Pardon me. There is an additional—that isn't quite all of it. Another part below that is added in this amendment. There are seven lines added to the specification on page 5 of the specification as filed.

Q. Will you identify this added material in the patent in suit, the copy in 114-M?

A. In the patent in suit, 114-M, the reissue patent, 23,058, the insertion made starts in Column 3, Line 46, goes through that column, through all of Column 4 and through Column 5, down to and including Line 52, making a bit more than a full page of printed specification.

Q. You are familiar with the terminology of the claim of the patent in suit? A. Yes.

Q. And the terminology—words—in the specification? A. Yes.

Q. Now, I want to ask you about some of the words that appear in the claims of the patent in suit. A. Yes.

Q. Do you find a description of "air in the cooling compartment" in the specification?

A. No.

Q. Do you find a definition in the specification of "a maintained substantial temperature of air"? [1272]

A. Wait a minute. Now, we are referring to the specification as filed?

(Testimony of Glenn Muffly.)

Q. Read the words of the claim and I am asking you whether you find those words in the specification.

The Court: Are you talking about the original specification or the specification——

Mr. Ramsey: They are both the same, if the Court please. No. Pardon me. I meant—I get your point. No, I mean in any specification either in the original patent or the part of it originally submitted or in the reissue patent, any specification.

The Court: I think we ought to take this up in order. You have shown that for seven lines in the original file specification about 150 lines have been added.

Mr. Ramsey: That's correct.

The Court: Now, what is the point of that?

Mr. Ramsey: The point of that, if the Court please——

The Court: Well, I think you had better not answer and testify.

Mr. Ramsey: I thought I was just answering your question. I think it will appear to the Court later, not this next question, but it will appear later in this witness' testimony.

The Court: All right. Go ahead.

Mr. Ramsey: Did I fail to answer the Court's question?

The Court: No. I don't know the purpose of this, but [1273] I don't know a lot of purposes here. So go ahead.

Mr. Ramsey: Yes.

(Testimony of Glenn Muffly.)

Q. The question I asked you was whether the words in the claims "maintain substantial temperature of air" appear in the specification, any specification?

A. No. I think I should refer to my own marked copy of this rather than this one.

Q. Would that be more helpful?

The Court: Well, I don't think you can do that.

The Witness: Oh, it's my own markings.

Mr. Ramsey: All right.

Q. Do you find any words "relative humidity of air" in the specification? A. No.

Q. Do you find any words "air in the freezing compartment"? A. No.

Q. Do you find words "cooling refrigerant expander"? A. No.

Q. Do you find any definition of "heat-conducting surfaces of said expander"? A. No.

Q. Do you find the statement of the construction and arrangement of a "cooling refrigerant expander"? A. No.

Q. Do you find any statement as to the "maintenance of [1274] temperatures of said expander and said surfaces"?

A. No; very indirectly.

Q. Do you find any statement with regard to the "maintenance of air at stable temperatures in the cooling compartment"?

A. Again, no; but it might be inferred indirectly.

(Testimony of Glenn Muffly.)

Q. Do you find a description of a "freezing refrigerant expander"?

A. The word "expander" does not appear anywhere in the specification.

Q. Do you find a description of the "heat-conducting surfaces of the freezing refrigerant expander"? A. No.

Q. Do you find any statement as to its construction and arrangement in the specification?

A. No. I have only the drawing here.

Q. Do you find anything with regard to the "freezing refrigerant expander having a maintained temperature"? A. No.

Q. Do you find a definition of the words "a liquefying unit"? A. No.

Q. Do you find in the original specification as filed any description of "thermal insulation offering less resistance at one point than at another to the flow of heat in the freezing and cooling compartments"? A. No. [1275]

Q. And that is the part that was added, you say, in January of 1934——

A. Yes. That's this insert, right.

Q. And you have testified as to what that part was substituted for? A. Yes.

Q. Now, in interpreting these claims in the light of the specification, the disclosure, the teaching, you have had to adopt some conclusions, is that correct?

A. Yes.

Q. And I wonder whether you would step down

(Testimony of Glenn Muffly.)

to the foot of the exhibit 16-A and tell us what have you adopted as a cooling compartment?

A. As cooling compartment I have adopted 14, the upper larger compartment.

Q. Now, freezing compartment?

A. Freezing compartment is 12, but it could be stretched to include 20. 12 is a very small sleeve in the brine tank and 20 is the larger space.

Q. Are you sure it's 20, or is it 13?

A. Oh, pardon me. 13 is the space.

Q. Now, the thermal insulation, what is that?

A. Thermal insulation is 40 and 41, 38, 39, the material shown in the walls that surround the liner of the compartments.

Q. Well, what is the cooling refrigerant expander? [1276]

A. The cooling refrigerant expander must be the coil 25 in the cooling compartment 14.

Q. Do you find a finned coil or other frost-deterrent structure in the specification?

A. No. I find nothing of that sort.

Q. Do you see anything in the drawings, particularly Figure 2, which illustrates a finned coil?

A. No. This coil leads into a rectangle which might be a brine tank.

Q. What do you adopt as the freezing refrigerant expander, interpreting the claim?

A. That is the tube 22—the coil 22, which is in the brine tank.

Q. Now, what are the exposed surfaces or heat-conducting surfaces thereof?

(Testimony of Glenn Muffly.)

A. That would be the external surfaces of the coil 22.

Q. Now, volatile refrigerant?

A. Volatile refrigerant is the material circulated in the system. I don't believe it's specifically identified, but I know there must be such a refrigerant because there is an expansion valve. That indicates there is a volatile refrigerant.

Q. And what is a single liquefying unit?

A. That is the condenser 18 is the liquefying unit. If we expand that term and call it condensing unit it's this assembly in the machinery compartment 11. [1277]

Q. Now what is differential insulation?

A. That, I assume, refers to the insulation 39 as compared with 41, or 38 compared to 41, or 40 compared to 38.

Q. Now, what is said with regard to the placement of the temperature actuated motor controlling switch 31 with respect to the differential insulation?

A. It is in the compartment having the greater heating—heat link there into or thereto.

Q. Now—— A. The——

Q. Did I interrupt you?

A. The warmer compartment, and that is explained as having more heat in it.

Q. That is the compartment 14?

A. Compartment 14.

Q. Fine. Thank you. I wonder whether you would again look at the file wrapper.

(Testimony of Glenn Muffly.)

The Court: Look at what?

The Witness: The file wrapper.

Mr. Ramsey: The file wrapper that he was referring to. That is Plaintiff's Exhibit 101.

The Witness: Right.

Q. (By Mr. Ramsey): When was this application originally filed?

A. This was filed February 16th, 1931. [1278]

Q. Now, I ask you to refer to pages 8, 9, and 10, of the file wrapper. What is contained on those pages? A. Those are claims.

Q. Are those the claims of the application as originally filed?

A. As originally filed, starting with Claim 1.

Q. We won't go through all of the claims, but can you summarize what these claims originally filed covered or attempted to cover or claimed or monopolized?

A. Well, Claim 1 is only two lines and that's——

Mr. Cuningham: If your Honor please, I object. I think that's construction of a legal document, not for this witness, but for the Court.

The Court: I don't know what you want me to do about that.

Mr. Cuningham: I think he should not be allowed to testify about the meaning of these claims. I don't think he is qualified.

The Court: Well, I held against you on that. I don't think this is a good time to start in on all these claims because we want to take a recess in a

(Testimony of Glenn Muffly.)

couple minutes. But I would like to ask you a question that has been bothering me.

Mr. Ramsey asked you whether a number of terms were defined either in the specification or in any other [1279] place in the patent. I would like to know, are those terms defined or similar terms ordinarily defined in the patent?

The Witness: Yes. The terms from the—he is comparing the terms used in the claims with the terms used in the specification, and he was asking me about the specification of the patent. I assume it's partly to identify what I understand each of those things to mean, what those words mean. There are some words used in these claims that are not common in the industry.

The Court: Oh. So it's your point, then, that some of these words that were used are not common in the industry and ordinarily are defined, and by reason of their not being defined you have to make certain assumptions?

The Witness: He wants me to define some words, I assume, yes. I have to, in reading the claims, determine what those words mean and it is a bit difficult; somewhat by a process of elimination I determine what they have to mean, the words in the claims.

The Court: Mr. Muffly, would a man who is a skilled refrigerator engineer be able to read those specifications and construct a box?

The Witness: From the specification he could construct a box as shown in the drawings, yes. He

(Testimony of Glenn Muffly.)

wouldn't need much guidance to take that drawing and make a cabinet and system like it. [1280]

The Court: And would that correspond with the claims?

The Witness: Not quite. That's one of the points, that the claims differ from the disclosure and in some respects are vague. I imagine that Mr. Ramsey was going to ask me something about——

The Court: Well, don't worry about what Mr. Ramsey is going to ask you. He will have that opportunity.

The Witness: All right.

The Court: I think that was something that was bothering me, and I thought perhaps it was bothering some of the jury, too.

So we will take a recess now for about ten minutes.

(Recess.) [1281]

Q. Mr. Muffly, have you asked me to have the Judge's questions repeated to you?

A. Yes, I have.

Q. Do you think you might have misunderstood his questions?

A. I would like to have one reread. He started out, "Could I build this refrigerator——"

(Discussion off the record.)

The Court: I think I said could a man who was skilled in the art, by referring to the drawings and the description, construct a refrigerator of the type

(Testimony of Glenn Muffly.)

constructed by Potter, or could he construct a refrigerator?

The Witness: Yes.

Mr. Cuningham: That is, if Mr. Muffly knows, in his opinion, you mean?

The Court: Yes.

The Witness: Yes, and I said "Yes," to the question. The question was whether that was all of the question. I think that is right.

The Court: Then the next question I asked you, would it correspond with the claims in the reissue patent?

The Witness: Oh, then it was two questions, and that one I should have answered "No."

The Court: You did answer it "No" before.

The Witness: Did I? Well, then, I am all right.

The Court: You said that there were differences [1282] between——

The Witness: Yes, that is right; I said there was a difference. I was a little worried that that one question I had given the wrong answer to.

Q. (By Mr. Ramsey): There was another question the Court asked with regard to the specification and the words that appear in the specification—words of the claim, and he asked you, "Do the words of the claim," as I understood the Court's question, "have a definition basis in the specification?"

The Court: No, I did not ask him that question. I asked him whether the words that you asked him originally with reference to whether or

(Testimony of Glenn Muffly.)

not there were definitions in the specifications, and I said to him, "Are those words ordinarily defined in patent applications?" That is the question I asked him.

The Witness: They should be defined in the specification, and some I said were not entirely clear, words in the claims that are not in the specification.

The Court: The question was, are they ordinarily defined in patent applications, and what is your answer to that?

The Witness: Well, they should be defined in the specification in order to use them in the claims.

The Court: All right. [1283]

Mr. Cuningham: May I ask if those are the terms he has listed like air in the freezing compartment that should be defined in the claims or in the specification, things like that, or just plain air?

The Witness: No, they referred to things like the word "expander," is an example.

The Court: Is your answer that some of the words used by Mr. Ramsey should have been defined and others are well known to persons in the art?

The Witness: Yes; could easily be determined, or there might be a difference of opinion between attorneys as to whether or not they should be, anyway.

The Court: What about the word "air" in the compressor or expander? What was the phrase that you used, Mr. Cuningham?

(Testimony of Glenn Muffly.)

Mr. Cuningham: Well, your Honor, the simplest one is "air," plain air, a-i-r.

The Court: The word "air" standing alone does not need to be defined in the patent application?

The Witness: I can't answer it from a legal angle, but I would know what it meant if I read it in the claim.

The Court: In your opinion, it needed no definition?

The Witness: The word by itself, I would understand it to mean air in the space concerned. Of course, if it referred to air temperature, I would assume it meant the [1284] air in that space.

Mr. Ramsey: The question, if the Court please, went to certain kinds of air, humid air or temperature air or maintained air.

Mr. Cuningham: Or relative humidity of air is one that I copied carefully. Now what is relative humidity of air?

The Court: Go ahead.

Q. (By Mr. Ramsey): Turning to Page 8, we were looking at some—that is of Defendants' Exhibit 101—we were looking at some of the typical claims. We were looking at the claims he originally submitted. You commented on Claim 1 and read it.

The Court: He did not read it.

The Witness: I was suggesting I read that because it was the shortest.

Mr. Ramsey: Read Claim 1.

A. Claim 1 reads:

"A refrigerator having a freezing compartment,

(Testimony of Glenn Muffly.)

and a cooling compartment thermally separated from said freezing compartment."

Q. Next, skipping down, oh, say, to the fourth claim, how does that read?

A. That reads:

"A refrigerator having a cooling compartment, a freezing compartment thermally separated [1285] from said cooling compartment, expansion coils in each of said compartments connected in series, a means for controlling the admission of refrigerant to the coil of said freezing compartment."

Q. Now the seventh.

A. Claim 7 reads:

"A refrigerator having a combination cabinet in which is formed a pair of thermally separated compartments, each of which is provided with an expansion coil, said coils being connected in series, means for regulating the admission of refrigerant to the coil in the freezing compartment, a heat-pumping unit connected to the discharge end of the cooling compartment coil, and a temperature-actuated control switch for said pumping unit disposed within said cooling compartment."

Q. Do you think those are typical of the remainder? A. They are.

Q. Now turn over to Page 13 of the file wrapper. What is that?

A. That is an office action mailed October 8, 1931, paper No. 2. It is a rejection. The claims are all rejected, citing a reference, "Davenport 1,731,711."

(Testimony of Glenn Muffly.)

Q. Next, turning over—no, remaining at that same page, [1286] how did the applicant then, Potter, attempt to distinguish over Davenport? What did he say? Would you read that? It is short.

A. Going to the reply?

Q. That is on Page 13.

A. Starting on—that would be Page 14 where the reply comes.

Q. Pardon me; yes, it is 14, yes.

A. In response to this paper dated October 8th, the remarks?

Q. Yes; can you summarize, though, to save time?

M. Cuningham: I object, your Honor.

Mr. Ramsey: Read them all.

Mr. Cuningham: I do not want it colored.

The Witness: Read them directly?

Mr. Ramsey: Yes.

A. Under the heading of "Remarks:"

"The examiner states that 'what the applicant refers to as his cold storage compartment corresponds to the space between the evaporator 4 and the walls of the compartment 6' of Davenport.'"

Now, it continues, the examiner talking now——

The Court: No.

The Witness: Or, no, the attorney talking, pardon me:

"The attention of the examiner is respectfully [1287] called to the fact that Davenport is claiming 'a process of holding over the low temper-

(Testimony of Glenn Muffly.)

ature in the freezing element which comprises utilizing the surface condensation of the other to form a coating of frost on the freezing element'—whatever that may mean. It is certain, however, that this suggests the formation of a coating of frost on the freezing element. Nothing could more clearly differentiate the two inventions than this simple statement, since the applicants have, by the arrangement which they are claiming, eliminated this very condition."

Q. Now what happened thereafter?

Mr. Cuningham: If your Honor please, he has cut him short. There is much more to it including the signature at the end. Let us see whose representation this is.

Mr. Ramsey: Is it not the attorney for the patentee?

Mr. Cuningham: It is the attorney at that time who was substituted because he did not understand the invention.

The Court: There is nothing in the record to that effect.

Mr. Ramsey: I object to that and ask that that comment be stricken.

The Court: The jury is instructed to disregard the [1288] remarks. I think that the patentee is bound by the statements of his attorney. You can bind the plaintiff. Mr. Birkenbeuel can bind them.

Mr. Cuningham: May he continue?

The Court: Well, I think that it should be read. It does not have to be read by the witness. Do you

(Testimony of Glenn Muffly.)

want to read it yourself, or do you want to have somebody else read it? Under our rules, Mr. Ramsey, at any stage of the proceedings when you are conducting the examination you can read any portion of an exhibit. It does not have to be read at the time of introduction.

Mr. Ramsey: Fine; thank you. I think that the next might be pertinent and informative. May I read that? Counsel asked that I do. The next says:

"In the first place, they have provided three kinds of compartments, No. 14 which is a cooling compartment but not a freezing compartment, No. 13 which is a freezing compartment and in which are placed non-volatile foodstuffs, and the last a water-freezing compartment 12 in which only as much frost can form as results from water evaporation."

This is—I am not reading now—this is described in the drawing and the specification as——

The Court: Mr. Ramsey, you cannot do that. If you [1289] are going to read, read. The witness is the only person who can testify.

Mr. Ramsey: "In the compartment 13, which is separated therefrom, the temperature is so low that the frost is in the form of a white powder, and it is impossible for this ever to gain access to the water-freezing compartment 12. In the compartment 14 there is condensation but practically no frost, and if it does form it is caught in the collector 28 and transferred to the receptacle 30 after which it is never again frozen."

(Testimony of Glenn Muffly.)

Mr. Cuningham: I think we ought to have it all, your Honor.

Mr. Ramsey: I think that you may be able to do that. I do not mind reading.

"Most certainly Davenport does not suggest this in the patent cited, nor in any of his other patents with which the writer is familiar.

"It will interest the examiner to know that in spite of all work that has been done in refrigerating lines in the last decade it has remained for the applicants to evolve this highly desirable cabinet, which they are now engaged in placing on the market with most gratifying results. [1290]

"Without further entering into the various claims on which a reconsideration has been asked the Examiner's attention is respectfully redrawn to the applicants' statements of invention. If the Examiner will kindly point out a reference which more clearly discloses these objects than does Davenport, and better still a reference which discloses a means for attaining these objects, the applicants will be glad to withdraw their claims, but in the absence of a better showing a favorable action is solicited."

Mr. Cuningham: Thank you.

The Court: "Respectfully submitted, Lewis J. Bronaugh, Thomas I. Potter, by their attorney, E. B. Birkenbeuel."

Mr. Ramsey: Yes.

Following that solicitation on the part of the applicants' attorney and referring to Page 16 of the

(Testimony of Glenn Muffly.)

file wrapper, what did the Examiner say? Following the Court's suggestion, I will read it to shorten the time. It refers to claims 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13 and 14, "are again rejected as presenting no invention over the patent to Davenport, cited above. See the last Office action.

"Claims 5 and 10 are rejected on the patent to Davenport on the ground of old combination. Applicant has merely substituted [1291] a thermostatic expansion valve for Davenport's expansion valve. This substitution is not deemed to involve invention. The patent to Eddy is cited above for the purpose of showing the use of thermostatic expansion valves.

"Claims 2 to 14, inclusive, are rejected as reading directly on the patent to Hunt, cited above."

The Court: I think you can point out that the applicants themselves abandoned Claim No. 1.

Mr. Ramsey: Yes, that is right, they can, and it was abandoned.

Then skipping over to Page 24, do you find that? Page 24 is the——

The Witness: It is the end of the document.

The Court: I think we are opening up quite a bit if we read Page 24.

Mr. Cuningham: That is the only statement by one of the patentees, I think, in here as distinguished from one by their attorney.

The Court: 24 is the statement by the attorney.

Mr. Ramsey: That is what I find.

The Witness: Then my 24 is——

(Testimony of Glenn Muffly.)

Mr. Cuningham: It is 23, your Honor, the way it is numbered here. [1292]

Mr. Ramsey: They were certified copies from the Patent Office, but the claims seemed to differ.

The Court: 24 is a letter from Mr. Birkenbeuel.

The Witness: Mine is different. 24 is a document ending signed by Mr. Potter.

Mr. Ramsey: Is that on Page 24 in the original exhibit?

The Witness: Page 24.

Mr. Ramsey: Letter from Birkenbeuel.

The Witness: It bears Mr. Potter's signature.

The Court: Is that the one you have?

Mr. Cuningham: Yes, your Honor, that is what I said. [1293]

The Court: Is that the one you have?

Mr. Cuningham: Yes, your Honor. That's what I said before.

The Witness: And——

The Court: You have a soft copy or certified copy?

Mr. Cuningham: I have a printed copy in the preceding litigation.

The Court: Well, I have a certified copy.

The Witness: I have a certified copy.

Mr. Ramsey: I have a certified copy.

Mr. Cuningham: And this is printed from the certified copy.

The Court: What were you asking about, a letter from Mr. Birkenbeuel?

Mr. Ramsey: That's correct.

(Testimony of Glenn Muffly.)

The Court: That's what mine is dated, October 5th, 1932.

Mr. Ramsey: That's correct.

In that letter his attorney writes Mr. Potter, then living in Buffalo: "Dear Mr. Potter: I hand you herewith a copy of Paper No. 4 in your application for a patent on a Refrigerator, Serial No. 516,032. The latest action in this case was taken on April 9th and I have purposely refrained from acting thereon as long as possible. I frankly believe that the Examiner is correct in his rejection on Davenport and do not see wherein our case could be improved by [1294] carrying this matter on further. I sincerely believe that there is nothing patentable in this case.

"The references in question are enclosed herewith.

"Yours very truly, E. B. Birkenbeuel."

Mr. Cuningham: Now, we might as well read the next letter and the next and the next.

The Court: You can do that in your case, Mr. Cuningham.

Mr. Cuningham: All right, sir.

The Court: Anybody can refer to any portion of an exhibit that has been admitted in evidence.

Mr. Cuningham: I should think that once he opened the subject he might——

The Court: Mr. Cuningham, I'm running this case.

Mr. Cuningham: I'm sorry, sir.

(Testimony of Glenn Mufily.)

The Court: You've been trying to run it ever since you got into this courtroom.

Go ahead.

Q. (By Mr. Ramsey): On my copy, page 25, is the next amendment. Does that correspond with yours?

A. Page 25 is an amendment received December 2nd, 1932.

Q. Yes. I direct your attention to Claims 15 and 16 on 25 and 26, and I will read the Claim 15 to you:

"A refrigerator comprising a cabinet formed with a dry, cold storage chamber and a relatively moist and warm cooling chamber thermally insulated [1295] from the cold storage chamber, a freezing coil in the cold storage chamber, a non-frosting coil in the cooling chamber, a line directly connecting said coils, and a heat pumping unit for drawing gasified refrigerant from the non-frosting coil and returning the same as a liquid into the freezing coil."

Have you examined the file, Mr. Mufily? First, is that or is that not a first reference to a non-frosting coil up to December 2, 1932?

A. Yes. That's the introduction of that term.

Q. Claim 16 is very similar and does that or does not that refer to a non-frosting coil?

A. Yes, that refers to a non-frosting coil in Line 5.

Q. And both of those were submitted to the patent office for the first time on December 2, 1932?

(Testimony of Glenn Muffly.)

A. Correct.

Q. Now, referring to page 28, Lines 3 to 16, on this subject of non-frosting coils:

"As is well known the non-frosting coils do not collect frost"——

this is a part of the amendment on the amendment filed to support these claims 15 and 16——

"As is well known the non-frosting coils do not collect frost because the vanes cannot carry off heat fast enough to be cooled much below the [1296] temperature of the air surrounding them. If the temperature of the vanes is, for instance, 38 or 36° Fahrenheit, and the average temperature of the air in the compartment is 40°"——

The Court: "In the chamber."

Mr. Ramsey: "In the chamber is 40° Fahrenheit, moisture will be precipitated upon the vanes until the moisture remaining in the air corresponds to the saturation point at 36° Fahrenheit, which is little below that"——

Mr. Cuningham: "But little."

Mr. Ramsey: "But little below."

"This moisture is not abstracted from the chamber and some of it is actually picked up by the air. At all events the air and the chamber has far more moisture than it would be if it were circulated against a freezing unit maintained at a temperature below 20° Fahrenheit."

So that was the argument in support of Claims 15 and 16.

Next, referring to——

(Testimony of Glenn Muffly.)

Mr. Cuningham: Is there a question, your Honor, on these?

The Court: I don't know. What is the question you are asking Mr. Muffly? [1297]

Mr. Ramsey: These are all in the basis of an argument made a little later and I must refer to these portions and the arguments and the later submitted claims so that my questions will make sense.

The Court: All right. Where do you want to read from now?

Mr. Ramsey: Referring to page 30, the last paragraph:

"Claim 4 distinguishes from Hunt because it calls for two compartments one being a freezing compartment and the other a cooling compartment with expansion coils in each of the compartments connected in series. This series connection is not found in the Hunt patent. As for the Davenport patent the evaporator 5 is not a coil and it is impossible with Davenport's construction to obtain the results which applicants obtained with their non-frosting coil in the cooling chamber."

Mr. Cuningham: "Cold coil."

Mr. Ramsey: "Non-frosting coil." Is that wrong?

Mr. Cuningham: Yes. "Cold coil."

Mr. Byron: "Coil" in mine.

Mr. Ramsey: "Coil" in mine.

The Court: No. He is reading it correctly, Mr. Cuningham.

Mr. Ramsey: "Applicants obtained with [1298]

(Testimony of Glenn Muffly.)

their non-frosting coil in the cooling chamber." Is that the way yours reads?

"Reconsideration of claim 4 is requested."

The Court: You read it correctly.

Q. (By Mr. Ramsey): Are you familiar with the Hunt patent and the Davenport patent?

A. Yes.

Q. Are you familiar with them? A. Yes.

The Court: He has already answered he is.

Mr. Ramsey: I didn't hear.

I wonder if you could step down to the blackboard so that this argument will be understood by the jury and see what the attorney is saying at this point. Could you use the other side of the board? The reference at this stage is to the Davenport patent. Do you have the patent to work from? A. No.

Mr. Byron: He has got a copy of the Davenport patent.

The Witness: Davenport patent? I have that.

Mr. Byron: 1,731,711.

The Court: What are you going to have him do, draw the Davenport patent?

Mr. Ramsey: A portion of it so that it will make —be intelligible to the jury what we are contending at this point. [1299] if you can do it quickly.

The Witness: This is 1,731,711. Figure 1 of it.

The Court: Mr. Ramsey, this man is your witness. You can ask him the ultimate question, then if Mr. Cunningham doesn't agree with him he can subject him to cross-examination and make him do

(Testimony of Glenn Muffly.)

anything he wants. But he doesn't have to go through all this as your witness. Maybe Mr. Cunningham will agree with him.

Q. (By Mr. Ramsey): Can you tell us what the Davenport patent does disclose, the pertinent portions?

A. It discloses a refrigerator described for domestic use with a freezing compartment in the bottom partially above and at one side of the condensing unit a flow is through an expansion valve.

Q. Pardon me. I have a rather good idea. We have that all drawn out in Plaintiff's Exhibit 114-L. I wonder if we could have that and then that will shorten it up a lot.

The Witness: Yes.

Mr. Ramsey: It's a big chart. I wonder whether it would be helpful. I have some miniatures of these charts.

The Court: I think the jury can see this.

Mr. Ramsey: Can they?

The Court: Yes. If they can't see we will bring it up a little closer.

The Witness: This is what we are going to look at. [1300] Would you like it a little closer?

Q. (By Mr. Ramsey): Now, the thing that I am just reminding you, Mr. Muffly, the remarks of the applicant at this stage are as to the Davenport patent:

"As for the Davenport patent the evaporator 5 is not a coil and it is impossible with Davenport's construction to obtain the results which applicants

(Testimony of Glenn Muffly.)

obtained with their non-frosting coil in the cooling chamber."

Now, just limiting that definition——

A. The Davenport patent shows the condenser over here (indicating), tube going over here to the freezer (indicating) coming into the expansion valve, and then coming up through an evaporator. 5 is the evaporator and it's merely a double line on the back wall of the cabinet. You wouldn't know there was an evaporator there because it's merely a double line. And 5 is the identifying number, and that refers to a sheet metal evaporator that covers the entire back wall of the refrigerator.

As we look in the front of the refrigerator this 5 points over to the back wall. That is the evaporator which cools this upper compartment.

Q. Is that the cooling compartment?

A. That is the cooling compartment.

The lower compartment is the freezer. Figure 16 [1301] appears in it.

Mr. Byron: 3 is the freezing chamber?

Q. (By Mr. Ramsey): Can you see from the drawing?

A. Letter C. C is the freezing chamber, and that refers to the space in which these items are located. From there the refrigerant goes up through this large flat evaporator that covers the back wall of the main food compartment or cooling compartment.

Q. (By Mr. Ramsey): Now, is that a cold-wall refrigerator type?

(Testimony of Glenn Muffly.)

A. That is close. It's a bit different because this is actually inside of the compartment B, the warmer compartment. The cold-wall type would more properly refer to the other Davenport patent alongside it.

Q. What number is that?

A. That's 1,726,344.

Q. Would you explain that very briefly?

A. Well, the evaporator 5 is actually within the compartment B being placed inside of the compartment, whereas the evaporato shown by the dotted line GE Sub A—and I think the general—no capital E—this evaporator that cools the main food compartment in the 1,726,344 Davenport patent has a coil outside of the compartment between the liner and the insulation, and that would be strictly a cold-wall type.

Q. Now, the only point made at this stage is, he says that [1302] the Davenport Patent No. 1,731,711 that the evaporator 5 is not a coil and it is impossible with Davenport's patent to obtain the results which applicants obtained with their non-frosting coil in the cooling chamber.

A. That's not correct. You can do anything with the sheet metal evaporator that you can do with a coil.

Q. No. I'm asking, is that——

A. Oh, yes.

Q. ——'s that the contention that he is making?

A. The contention he made. I thought you were asking me if his contention was correct.

(Testimony of Glenn Muffly.)

Q. Let's see, then, you might take your seat again, Mr. Muffly, if you will, and look at page 48. Now, this is dated January 29, 1934, and this is where the long insert that you discussed was put in about differential insulation. A. Right.

Q. Is that correct?

A. That's correct. [1303]

Q. Is that correct? A. That is correct.

Q. And the claims that follow on Pages 52, 53, 54, 55 and 56 are directed to the subject matter of this added portion of the specification?

A. Yes.

Q. Referring to Page 57, do you find that?

A. Yes.

Q. And reading just the first paragraph to you: "At said conference—" which is some time prior to the date of this amendment—"At said conference mention was made of the patent to Anderson, No. 1,439,051, issued December 19, 1922, and it is requested that this patent be made of record in the present case. The Anderson patent shows a cabinet with two refrigerating chambers therein, one of which is adapted to be maintained at a much lower temperature than the other. In Anderson's low-temperature chamber there is an open coil adapted to support ice trays. Anderson does not provide a cold storage compartment and a freezing compartment as separate chambers, but in order to avoid any possible confusion as to the scope of Claim 2 this claim has now been amended to state specifically [1304] that the cold storage compartment

(Testimony of Glenn Muffly.)

is separated from although therma'ly connected to the freezing compartment."

Is this the first reference in the file history, file wrapper, to the Anderson patent? A. It is.

Q. That was in the amendment of January 29, 1934? A. Yes.

Q. When he added all of this long insertion to the specification.

Next, directing your attention to a little further down on the page when he is arguing about Claim 15 which is newly inserted, and he says, "Claims 15 and 19 avoid the Anderson patent in calling for a non-frosting coil in the cooling chamber." Is that correct?

A. That is correct, the word "for" instead of "in," calls for a non-frosting coil in the cooling chamber.

Q. Yes, that is correct. Now, next referring to Page——

The Court: Are you asking him whether the statement is correct, whether you read it correctly, or whether that is true?

Mr. Ramsey: No, he corrected my reading of it, and at least I thought he did, and I said——

The Court: Mr. Ramsey, when you asked Mr. Muffly a question were you just asking if you read the statement [1305] correctly or whether the statement is correct?

Mr. Ramsey: No, I did not ask him the latter. I will come to that, if the Court please, where it gets down into more exact definitions.

(Testimony of Glenn Muffly.)

The Court: Very well.

Mr. Ramsey: Next referring to the file wrapper Page 70, and this is the point, if the Court please, where——

The Court: Go ahead.

Mr. Ramsey: Yes, this is an argument made by the applicant under date of March 6, 1936, to an action, Office action of September 7, 1935, in which the Examiner holds to a rejection on the Anderson patent, and starting at the top of Page 70 the attorney for applicant states as follows:

"Examiner naturally assumes that because one of the chilling elements is immersed in water the chamber which it chills must be maintained at a temperature above the freezing point. This is very true, but it does not mean that the surface temperature of the chilling element would be maintained above the freezing point if there were no water present. In actual practice, such elements gather frost were they not immersed in water."

Stopping the quote at that point, as an expert, Mr. Muffly, would this be true, any evaporator or any cold [1306] surface that is immersed in water would be non-frosty?

A. The surface immersed in water might collect ice, not frost, and the question of whether or not it collected ice would depend upon its temperature.

Q. But then it would not be water; it would be ice that covered it?

A. It would then have a coating of ice.

(Testimony of Glenn Muffly.)

Q. Going on with the quote:

"In actual practice, such elements would gather frost were they not immersed in water. As distinguished from these soda water cabinets, applicants have produced a refrigerator adapted for household use and containing at least two thermally separated chambers which in the new claims are termed 'air chambers' to distinguish them from liquid-containing tanks. Applicants' invention comprises a refrigerating system in which one chamber is maintained at a temperature well below 32 degrees F., and another chamber maintained at a temperature above this point, and the chilling unit in the latter chamber operates at a surface temperature that is above the freezing point so that no frost will collect thereon to rob the air of the chamber and the foods therein of moisture," [1307] breaking the quote at that point.

He is now limiting claims on non-frosting to those exposed to air?

Mr. Cuningham: I object.

The Court: Objection sustained. That is a leading question, Mr. Ramsey. Are you making a statement to the jury, or are you asking Mr. Muffly a question?

Mr. Ramsey: No, I was asking this witness an interpretation of the language.

The Court: I sustain the objection. It is a leading question.

Q. (By Mr. Ramsey): Then assuming that claim, Mr. Muffly, defines a cooling element in which

(Testimony of Glenn Muffly.)

a surface temperature is exposed to air and that that would occur in a claim, would that limit the claim to that language?

A. Yes, that would be a limitation of the claim.

Q. Reading on:

"This inventive thought is not disclosed in any of the references cited. In the patent to Davenport, No. 1,731,711, for instance, it is definitely stated that the element 5 in the chamber B becomes frosted during operation of the refrigerating system and defrosts itself during the periods when the machine is cut off"—breaking at that [1308] point.

Following that interpretation in claim, would such language be limited to non-frost evaporators rather than frost-defrost types?

Mr. Cunningham: If your Honor please, I must say I do not understand the questions.

The Court: Neither do I.

Mr. Cunningham: I do not think anybody does.

Mr. Ramsey: The point of the question, if the Court please, is that at this stage this applicant has been driven—he first presents claims for a non-frosting evaporator, that is, one that does not collect frost, and he is distinguishing at this point between those that will not frost and those that will frost and defrost during an operating cycle, and that was the point of my question to this witness.

The Court: Do you understand what he means?

The Witness: Yes; I think I ought to have the

(Testimony of Glenn Muffly.)

question read back, but I know what he is talking about. I can answer it.

The Court: What is he talking about?

The Witness: This sentence that he has read refers to a situation where the evaporator becomes frosted during operation of the system that is on an on-cycle, and it defrosts itself during the periods when the machine is cut off. That is what we call a frost-defrost cycle or a self-defrosting [1309] cycle. The surface loses its frost each time the machine stops, so you gather some frost and lose it and gather it and lose it, but you do not necessarily have to do any defrosting job.

The Court: What does he say about that, that that was disclosed in Davenport, that frosting and defrosting?

The Witness: Let's see (reading document). He is saying that Davenport does disclose that sort of a device; that Davenport, for instance, it is definitely stated that the element 5 in the chamber B becomes frosted during operation of the refrigerating system and defrosts itself during the periods when the machine is cut off.

Mr. Cuningham: That is true, isn't it? That is what Davenport says?

Mr. Byron: Wait. Who is examining here?

The Court: Does he distinguish the patents—the invention which he claims from Davenport?

The Witness: That is his purpose in this argument, yes.

(Testimony of Glenn Muffly.)

The Court: What does he say that Bronaugh and Potter do differently than Davenport?

The Witness: He says on Page 71 near the top, continuing the argument:

"It will thus be apparent that Davenport not only fails to disclose the idea of maintaining [1310] humidity in his food chamber to prevent of drying out of foods but actually provides special means for getting rid of this moisture."

The Court: In other words, does he contend that in Bronaugh and Potter the chilling unit operates at surface temperature, and is that how he distinguishes it?

The Witness: Yes, on down to Page——

Mr. Cunningham: They both operate at surface temperature, your Honor. I do not understand.

The Court: Go ahead.

The Witness: In talking of this claim, he has a new claim, 36, "The claim is more specific than certain claims previously canceled because it specifies air chambers and also specifies a fixed lower limit of operating temperature at the surface of the chilling element."

The Court: What does that mean?

The Witness: That the contact with air is at above the freezing point so it cannot collect frost.

The Court: So he says that Davenport provides a mechanism by which the cycle goes on and off in order to prevent frosting, in order to minimize frosting?

The Witness: Yes.

(Testimony of Glenn Muffly.)

The Court: But in Bronaugh and Potter there is nothing frosting because the chamber is maintained at a temperature which is above freezing? [1311]

The Witness: Well, he is arguing that the surface is maintained above freezing. The chamber would always be warmer than the surface that cools it, so the chamber would be above freezing and still the surface go below freezing.

The Court: In general, is that how he distinguishes Davenport?

The Witness: Yes, he is arguing that Davenport is a frost-defrost cycle, a frost-defrost in the regular stop-and-start cycles of the refrigerator.

The Court: Go ahead.

The Witness: Whereas, he just does not collect frost.

Q. (By Mr. Ramsey): Now, further on that subject, I ask you to refer to Page 73 which is a Patent Office action dated May 6, 1936, and this subject of non-frost is again brought up and follows a record of rejection by the Patent Office. In this action of May 6th the Examiner states, and I quote:

"Claims 5, 7, 16 and 32, previously found to be allowable, are finally rejected as reading directly on the patent to Anderson, of record. These claims each recite a combination consisting of the following elements:

(A) A two-compartment refrigerator, [1312] each compartment being insulated from the other:

(Testimony of Glenn Muffly.)

(B) A motor-compressor unit outside of these two compartments;

(C) An evaporator in each compartment, one evaporator adapted to operate at a freezing temperature and the other adapted to operate at a higher temperature;

(D) A pipeline serially connecting the compressor and two evaporators;

(E) An expansion valve in the pipeline in advance of the first evaporator;

(F) A thermostat in the compartment housing the higher temperature evaporator for operating a switch in the motor circuit.

All of these elements, but (F), are clearly shown in Anderson's Fig. 1. However, Anderson in Lines 91 to 106 on Page 1 of his patent, states that he may make use of a thermostat in his higher temperature compartment for controlling his motor."

Then next referring to—and here is where I want to comment, Mr. Muffly—Pages 82 and 83, at the middle of Page 82, this is an argument supporting new claims, attempting to define over the old claims that [1313] were rejected and made by the applicant, that is, the persons that are trying to get the patent, and it goes to the question of this Anderson patent which has had this jury's consideration, and I read to you, Mr. Muffly:

"Before proceeding with a discussion of the references above listed, we would point out in what manner the new claims distinguish from the patent to Anderson, No. 1,439,051, on which Claims 36

(Testimony of Glenn Muffly.)

to 39, inclusive, were rejected. The withdrawal of these claims is not to be construed as an admission that they are met by the Anderson patent. They have been replaced by the new claims so as to put them in better form and so as to avoid the new references, as will be explained hereinafter.

"The Anderson patent shows two chambers insulated from each other and from the outside atmosphere, with a chilling unit in each,"—breaking the quote.

Is that also true, Mr. Muffly, in the patent in suit? A. It is.

Q. Next sentence:

"However, nothing is said in the Anderson patent regarding the surface temperature of the [1314] chilling unit in the warmer chamber."

That is also true in the patent in suit as far as the specification is concerned? A. Yes.

Q. Next quote:

"It has been common practice prior to applicants' invention to cool a chamber to a low temperature well above the freezing point with a chilling element whose surface temperature is well below the freezing point, and the natural inference is that Anderson's upper coil has a surface temperature below the freezing point. Certainly there is nothing in his specification to teach the contrary. Furthermore, Anderson's chilling units are connected in series, and no means are provided for maintaining a different pressure in the two chilling units."

Is that true in the patent in suit?

(Testimony of Glenn Muffly.)

A. That is also true in the patent in suit. [1315]

A. That's also true in the patent in suit.

Q. Continuing the quote: "or for forming the upper chilling unit with a broad heat-absorbing surface." Now, breaking the quote. Is there anything in the patent in suit defining a "broad heat absorbing surface"? A. No.

Q. Going on with the quote:

"Such as would prevent the formation of frost thereon. It will be obvious to anyone skilled in the art that the coils in Anderson's warmer chamber must have a surface temperature below the freezing point either throughout the length of the coils or through a substantial extent thereof for if Anderson's apparatus were so arranged that all the refrigerant were evaporated in the lower chilling element there would be little cooling effect left in the completely vaporized fluid passing up through the upper coil."

Is that also true in the patent in suit?

A. It is.

Q. Continuing the quote:

"Certainly not enough to cool the large upper food chamber adequately particularly since the latter chamber is the one most frequently [1316] used and is constantly being opened for introduction of food therein."

Is that also true in the patent in suit?

A. It is.

Q. Continuing the quote:

"Or the removal of food therefrom hence it will

(Testimony of Glenn Muffly.)

be apparent to anyone skilled in the art that Anderson's coils in the upper chamber must be maintained at a surface temperature below the freezing point of water."

Is that also true in the patent in suit?

A. It is.

Q. Next:

"The fact remains that Anderson does not anywhere in his specification teach the invention disclosed in the present application."

Is that also true in the patent in suit?

A. It is.

Q. Next, going on in this same amendment where he is called upon to distinguish over other patents. Going to the middle of page 84 and reading the patent of Davenport—do you find that?

A. Yes.

Q. And you have been discussing the Davenport patent in connection with the exhibit that still is before you, [1317] Plaintiff's Exhibit L. I will read this to you:

"The patents to Davenport, Nos. Re. 17,078, 1,769,112 and 1,769,117, are cited because they disclose constructions which might be arranged to produce applicants' effect of sharp freezing in one chamber and cooling in another chamber without dehydration below 100 per cent humidity at 32 degrees Fahrenheit."

Is that the same result that they contend for? Is that the same thing they contend for as a result in these claims in suit?

(Testimony of Glenn Muffly.)

A. Yes.

Q. Next following:

"However, to obtain this effect Davenport has been obliged to use a combined vapor and gas refrigerating system. In Reissue 17,078, for instance, there is a single chilling element through which volatile fluid and a noncondensible gas are passed. In order to distinguish clearly from the Davenport construction, the new claims all call for a refrigerating system employing a volatile fluid as the sole refrigerant therein."

Can you explain that to the jury, the difference between what he is trying to say about the Davenport construction Reissue 17,078? [1318]

A. Davenport used an evaporative refrigerant and he put some air or non-condensible gas, something that did not evaporate, mixed it in to help stir it up so it would evaporate more readily. And that is the distinction between those patents. Davenport had a single evaporative refrigerant and in addition he had some air, and the air in that case was not used as a refrigerant. So I would say that here is still one refrigerant and that one was evaporative.

Q. And in this structure which the applicants describe at this point is it your understanding from reading this that he admits that Davenport can have a cooling chamber having high humidity or moist cold, but he claims that the difference is that Davenport uses two refrigerants or one volatile re-

(Testimony of Glenn Muffly.)

frigerant and air, while he uses only a volatile refrigerant?

A. Yes, that's the distinction he is drawing.

Mr. Cuningham: As you understand it?

Mr. Byron: Wait a minute. Wait a minute. That's not called for.

The Court: That's right. He is just expressing his own opinion. How long are you going to continue with this line of interrogation?

Mr. Ramsey: We are close to the end of the file wrapper but, as in all file wrappers, when an applicant is required to sharpen and sharpen and define and define——

The Court: Mr. Ramsey—— [1319]

Mr. Ramsey: Excuse me.

The Court: ——I just asked you a simple question. Page 66 ends the representation by Bond on behalf of Potter and Bronaugh. Do you propose to go further than that or stop there tonight? It's 4:30 now.

Mr. Ramsey: We can stop. It may be, I would say, posibly a half hour to get through the remainder of the distinctions that he makes.

The Court: Well, the distinctions which Mr. Bond makes on behalf of the Potter and Bronaugh?

Mr. Ramsey: That is correct.

The Court: Earlier today you read Mr. Muffly some statements, asked him if they were contained in the file wrapper, and then you indicated that you were going to ask him a question on it. I haven't

(Testimony of Glenn Muffly.)

heard the question yet. It was one involved at page 31, starting at the bottom of page 30:

"As for the Davenport patent the evaporator 5 is not a coil and it is imposible with Davenport's construction to obtain the results which applicants obtained with their non-frosting coil in the cooling chamber."

Now, you asked him if that was a correct statement, if you read it correctly, and he said you did. Are you going to ask him if that statement is true or not?

Mr. Ramsey: The witness thereafter defined by reading [1320] from the patent what that meant. These are only representations and representations against interest that I am asking the witness to describe and interpret. Limiting factors.

The Court. Well, maybe tomorrow you had better ask him that again because I didn't understand it.

On page 51 you said something about the difference in insulation. Mr Muffly, was that the first time that the different widths or sizes or quantities of insulation were disclosed?

A. In the specification, yes.

The Court: Was it shown in the drawings?

A. The drawings show, as I pointed out, some thicker areas of insulation.

The Court: But, this was the first time it was shown in the specification?

A. The first time it was put into the specifica-

(Testimony of Glenn Muffly.)

tion. The drawings, I think I pointed out on the larger chart, show some thicker areas.

The Court: And did the claims claim a difference based upon different sizes in the insulation?

A. Not to start with. Those came in later after the broader claims were finally rejected, and this additional material had been inserted in the specification.

The Court: All right. Well, I am just trying to ask questions that bothered me and I assume that when I don't [1321] understand something most likely the jury doesn't understand it either.

I think this is a good time to quit.

Ladies and gentlemen of the jury, I am still hoping that this case will be through by Thursday night and I think you can assume that the case will be over in any event this week, and you are now excused until tomorrow morning at 9:30.

(Whereupon the jury was excused.)

(The following proceedings were had out of the presence of the jury:)

The Court: Mr. Ramsey, how long do you propose to interrogate Mr. Muffly?

Mr. Ramsey: I think that I can get through within a day; that is, through tomorrow morning. We are through the file wrapper and we have all our comparison charts to go through and explanation of the accused devices. It will go faster but it does take time.

The Court: Well, the only thing I suggest is don't waste any time.

(Testimony of Glenn Muffly.)

Mr. Ramsey: I'll try not to.

The Court: Recess until 9:30 tomorrow morning.

(Whereupon, at 4:30 o'clock p.m. an adjournment was taken until Tuesday, November 29, 1955, at 9:30 o'clock a.m.) [1322]

Tuesday, November 29, 1955, 9:40 A.M.

(The trial herein was resumed, pursuant to adjournment, and further proceedings herein were had as follows:)

GLENN MUFFLY

a witness produced in behalf of Defendants, thereupon resumed the stand and was examined and testified further as follows:

Direct Examination
(Continued)

By Mr. Ramsey:

The Court: Mr. Ramsey?

Mr. Ramsey: I wonder if we might have Exhibit 114 put on the easel and brought closer to the jury so they can read it.

(Exhibit referred to produced before jury.)

Mr. Ramsey: Will you please give the witness Exhibit 114-A.

(Discussion off the record.)

(Testimony of Glenn Muffly.)

The Court: Mr. Cuningham, do you have a copy of this?

Mr. Cuningham: I do, sir, but I left it at the office this morning.

Mr. Cheatham: Your Honor, I have sent for them, and they will be here shortly.

Mr. Ramsey: May I loan you one, Mr. Cuningham? [1323]

Mr. Cuningham: Thank you very much.

The Court: Mr. Cuningham, do you have any objection if a few copies are given to the jury so that they can follow?

Mr. Cuningham: Well, if they have a copy of the patent, if a copy of the patent is given them at the same time, your Honor, I would have no objection.

The Court: I mean just to be able to follow Mr. Muffly. If these two people were given one and then there were a few of the others, perhaps three or four persons would be given copies, and then they would be able to pick it up immediately after.

Mr. Cuningham: If your Honor please, this chart contains legends and statements not included in the patent. It purports to be, and probably is, an accurate copy of the patent claim, but it is subdivided into various elements according to this witness' ideas, I suppose, or somebody else's idea. I think that it would be absolutely necessary for a fair presentation to enable the jury to compare this chart with all its unusual and extraneous legends with the claim of the patent in suit. Now, I would

(Testimony of Glenn Muffly.)

be equipped to supply, I hope, sufficient copies of the patent in suit to accompany copies of the chart.

The Court: Mr. Cuningham, the only suggestion I made was to permit the jury to better follow the remarks of [1324] Mr. Muffly. I do not want them to take this document home with them and study it, nor do I want them to take the patent in suit or the Admiral patent, if they have any, home to study it. The only suggestion I made was that they be given three of four copies, because of the fact that the chart, which is identical to the copies that I have in my hand, is so small that they might have difficulty reading it.

Mr. Cuningham: I understand that, sir.

The Court: I just want them to be able to understand it better.

Mr. Cuningham: I do understand that, sir, but my point is, and I am sure I have not made myself clear, this is not a correct representation of the patent.

The Court: You will be able to put on your case—very well, there is an objection so we cannot do it

Mr. Ramsey: Referring to Exhibit 114-A, what does this show, Mr. Muffly?

The Witness: This shows to the left the drawing of the Admiral refrigerator——

Mr. Cuningham: If your Honor please, apparently there is some dissension in our ranks. I will withdraw any objection to showing that chart, and

(Testimony of Glenn Muffly.)

I will expect to offer the patent in our case. Is that what your Honor suggests?

The Court: Yes.

Mr. Cuningham: I am so sorry. I [1325] misunderstood.

The Court: You may offer anything you want. Just give about six copies, give those to the two alternate jurors. They seem to have the most difficulty in seeing.

Mr. Ramsey: If the Court please, I only have two besides the one I loaned Mr. Cuningham.

(Discussion off the record.)

Q. (By Mr. Ramsey): What does that show, Mr. Muffly?

The Witness: At the left is a view of an Admiral refrigerator. At the right is a copy of the drawings in the patent in suit.

Q. I notice that there are colors on the chart. What do they signify?

A. These colors signify the refrigerant circuit in the patent in suit. You can see red to indicate the condenser portion of the system and green up above to represent the cooling portion of the system. The red part is, the heat is disposed of here. Here is where it is picked up. That is the cool end in the same way you have red to indicate the condenser in the base. We have green to indicate the evaporator that surrounds the freezer. We have other colors, namely, yellow and blue, to indicate the secondary system which also has a condenser

(Testimony of Glenn Muffly.)

indicated by yellow and an evaporator indicated by blue, there being four colors here, two colors in the patent in suit.

Q. In the middle there is something called "Claim 2 Bronaugh-Potter [1326] Reissue 23058." It has been agreed that that is probably the broadest claim in this patent in suit. It is broken down into numerals on the left-hand side. What do the numerals represent?

A. They represent elements of the claim starting with Figure 1 at the top appearing on both sides, a cabinet, and the lead line points to the left of the Admiral cabinet and to the right, No. 1, is the Potter cabinet.

Q. You explained yesterday the refrigeration circuit of the patent in suit. Would you briefly go over the refrigeration circuit in the Admiral refrigerator?

A. In the Admiral we have the motor compressor in one element, in the sealed unit of today, that discharges high-pressure refrigerant into the condenser which is the red-colored part in the base of the cabinet, and from that a tube leads upwardly through the insulation and at the outlet end of that tube it becomes green. That tube is a restricting device that reduces the pressure, so here we have low-pressure refrigerant entering the evaporator coil of the freezer. That is a coil that is wrapped around the liner of the freezing compartment.

That refrigerant also may pass through, may be passed through the green portion along with the

(Testimony of Glenn Muffly.)

dotted lines on this rectangular plate below the freezer and shown above the main food compartment, so you can see it. That is the [1327] primary evaporator that is used at times as required to cool the condenser which we see below it in yellow, and that is the condenser of the evaporator shown in blue which is around the main food liner, the cooling compartment liner.

Q. I wonder whether we might have the secondary liner, Defendants' Exhibit I think it is 114-A. It is 117, Defendants' Exhibit 117.

(Exhibit referred to produced.)

Q. You were explaining how the coils of the secondary surround the liner. Would you point to it?

A. Yes, I will try to. Now, a few of these blue coils we see here are back of the liner, and here we are looking at the back side of this liner, and you see these coils that have been protected with this paper because of the mastic composition of this material with which they are pasted up against the liner, and they run around the side across the back. There is a tube in the center that is painted red and runs down. That is this one (indicating). It is green on here. It comes down from the secondary condenser. Liquid flows down each evaporator and up and is condensed in this (indicating). This secondary system is the arrangement of tubing which we see attached to, mounted on the line of the Admiral refrigerator, and you are now looking at the

(Testimony of Glenn Muffly.)

rear side of that liner, and this plate is at the top of the back of the liner, is indicated in the drawing by the rectangle [1328] on which we see the yellow tubes representing the tubes that are hidden by this. Right back of this next to the liner then, that is the condenser which condenses refrigerant because of being cooled by the primary which is very cold, condenses liquid. The liquid runs down this tube and evaporates as it flows up around zigzag on each side of the liner. That is what we refer to as the secondary refrigerating system that cools the main food space. [1329]

Mr. Ramsey: I wonder whether the jury could be shown Defendants' Exhibit 14-N. It is a photograph.

Q. Now, does that portray the secondary liner on the right-hand side of that as you have been explaining it—in the middle, rather?

A. Yes. This black part. You can see the lighter colored tubes zigzag back and forth just as they do on this Exhibit 117. At the right of that is the primary system; that is the main refrigerating system of the Admiral.

Q. Now, the colors which you were talking about are on a little colored card in the lower left-hand corner?

A. In the lower left-hand corner we have green, which is the primary evaporator; then red, which is the liquefying unit of the primary; that is the part in the base and in the very top is the primary; in between we have the secondary which is blue.

(Testimony of Glenn Muffly.)

the expander or evaporator; and the yellow on there for the liquefying unit or condenser, this rectangle (indicating).

Q. Does the portrayal of the refrigerator and, particularly, the schematic view of the system correctly reflect that that is in the accused structure manufactured by Admiral?

A. Yes. That is the correct showing of the system.

One difference is that these two plates have been separated so you can see them both. They really are clamped together. [1330]

Q. Now, considering the elements of Claim 2, I notice that you have on Elements 1, 2, 3, and 4 pointed to the corresponding portions in the accused structure. The cabinet is just the exterior of the refrigerator?

Mr. Cuningham: If your Honor please, I object. I think the witness ought to testify.

The Court: Yes. But that is a preliminary thing. Go ahead and tell us 1, 2, 3, and 4, what they refer to in both boxes without any——

The Witness: Without any further questions?

The Court: That's right. Is that all right, Mr. Cuningham?

Mr. Cuningham: Well, sir, of course you realize this is a very vital point of the case, the issue of infringement, as I understand it.

The Court: Yes. But he only went to the question of a cabinet, Mr. Cuningham.

(Testimony of Glenn Muffly.)

Mr. Cuningham: It seems to me leading at this point or giving him his head is objectionable, but I bow to your Honor's ruling.

The Court: Well, I am agreeing with you, Mr. Cuni. ham.

Go ahead, Mr. Muffly, and tell us what these various items refer to.

Q. (By Mr. Ramsey): Might we first break that down into the two, the cooling compartment—what is the cooling compartment?

A. The cooling compartment in the Admiral refrigerator is [1331] the compartment enclosed by/within the liner, the place where you put food, the main section of the refrigerator.

Q. Will you now point to it on the physical exhibit? What is the cooling compartment?

A. This space within. (Indicating.) This is the compartment enclosed by the door and its limits are the walls and the lining of the doors.

Q. Now, what is the freezing compartment Element 3?

A. The freezing compartment is the same portion of the upper in the top of the cabinet and we see that Exhibit No. 117-A. You can see it across the room.

Q. Would you mind going over there and pointing to it so there will be no difficulty?

A. I have—oh, they can't see it. I have placed my hand within the freezing compartment, and that is surrounded by this liner which in turn is sur-

(Testimony of Glenn Muffly.)

rounded by the primary evaporator, and this is closed, of course, by its own door.

Q. Fine. Thank you. Now, taking up Element 5 of Claim 2, what is the cooling refrigerant expander?

A. In the Admiral the cooling refrigerant expander is pointed to by the line that leads to Figure 5, and is that coil we have been talking about that is attached to the outside of the main food compartment liner. Did I understand I was to go right ahead?

Q. What was that? [1332]

The Court: Yes, that's what you were supposed to do and you missed No. 4.

The Witness: I repeat, then: We had the cabinet, I mentioned that. The cooling compartment is the interior of the main food space in both. It's 14 in the Potter and no numeral, but it's out in this space in the Admiral. No. 3, the freezing compartment. No. 4, thermal insulation points to the wall. That is cross-hatched to indicate insulated wall. And then the same way over here as a cross-hatched section that indicates insulation, and that does go around both compartments as the claim calls for.

Then we comes to 5, "Cooling refrigerant expander," and that points to the coil around the liner on the Admiral. And at the right of it points to the coil within the compartment 14 in the patent in suit.

Q. (By Mr. Ramsey): Would you state the number of the cooling coil in the patent in suit?

(Testimony of Glenn Muffly.)

A. 25 is the reference character pointing to the coil.

Q. Now, there is a legend following the first indentation under the No. 5, "Heat conducting surfaces within said cooling compartment." I note the legend "No." Would you explain them, please?

A. At the left I have placed "No." indicating that the heat conducting surfaces of this expander are not within; they are outside of the cooling compartment, whereas at the right [1333] it says "Yes," indicating that the coil 25 is actually within the compartment 14 in the Potter patent.

Q. Would you mind pointing to those parts again on the physical exhibit?

Mr. Byron: 117.

The Witness: On 117 this compartment (indicating) and on the——

Q. (By Mr. Ramsey): Never mind, just the compartment and what you call the cooling refrigerant expander.

A. The expander tube on the outside of it (indicating).

Q. Moving to the next bracket sub-indented portion, will you discuss that?

A. That section reads: "Constructed and arranged to maintain heat conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment." And at the left it says "No. Is a function of thermostat." And there is a pointer that leads to a thermostat and at the right likewise it says—there is a note—my note

(Testimony of Glenn Muffly.)

added—"No. Is a function of thermostat." And a lead line goes to the upper left-hand corner of the compartment 14 in the Potter refrigerator, where we see a device No. 31, which is the thermostat, stops and starts the motor.

Mr. Cuningham: Upper right-hand, is it not?

The Witness: Upper right.

Mr. Cuningham: I think you said "left." [1334]

The Witness: That's upper right. 31.

Q. (By Mr. Ramsey): Move to Element 6, "A freezing"——

The Court: I don't understand. Is your contention that the claim in the Potter is not accurate and that it doesn't do that which it proposes to do?

The Witness: The point is that the cooling refrigerant expander is not the device that controls the temperature or its own temperature. Its temperature is controlled by the controls, not by itself. It isn't a function of the expander itself to control its own temperature.

The Court: Well, what about the answer to my question, then? Is it Yes or No?

The Witnes: I am afraid I didn't—can you tell me that question?

The Court: Well, I was just asking you whether it is your contention that the claims from which you just read, "Constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment," is to be found in the Potter

(Testimony of Glenn Muffly.)

box, or is it the function of the thermostat and, if so, is that an error in the claim?

The Witness: I would say it's an error in the claim, and I have said "No" to both, meaning it does not read on the Admiral and it's also an error to state it that way in the Potter. [1335]

The Court: It doesn't read on the drawing of Bronaugh and Potter?

The Witness: That's right.

The Court: Go ahead.

The Witness: In both refrigerators it is the thermostat that contro's that temperature.

Q. (By Mr. Ramsey): Next considering Element 6, and I note a "No" on one side and a "Yes" on the other. Would you explain that quite briefly?

A. "A freezing refrigerant expander having heat conducting surfaces within said freezing compartment." Well, obviously on the left I say "No" because the expander is not within the freezing compartment but outside of it.

Mr. Byron: Will you please say "Admiral" and "the patent in suit" so we will all know?

The Witness: In the Admiral it obviously is not within the freezer but wrapped around the outside of it. On the right-hand side I say "Yes," with reference to the Potter refrigerator, the patent in suit, because it is within this large compartment 13, the expander.

Q. (By Mr. Ramsey): If I were to ask you to explain your legend "No" to the function of the thermostat with regard to the bracketed portion un-

(Testimony of Glenn Muffly.)

der Element 6 on both ends of it, would your answer be the same—would it not be the same as similar legends under Element 5? [1336]

A. Yes, it would be the same.

Q. Now, "Volatile refrigerant in said expanders" which is Element 7 and the bracketed portion thereunder. A. Yes.

Q. "A single liquefying unit associated with said expander and constructed and arranged to condense refrigerant expanded by heat extracted from both said compartments." Will you explain your legend and your interpretation of those to the jury?

A. The Item 7, "Volatile refrigerant in said expanders," at the left it says "Yes" with reference to Admiral because there is volatile refrigerant in all of the two systems of the Admiral.

On the right it says "Yes" because there is volatile refrigerant in the one system of the Potter refrigerator. And 7 and 9 are related because 9 says "Volatile refrigerant circulating through said expander being the sole heat extracting medium." There there is a difference. At the left there is a "No" because ther are two volatile refrigerants.

Mr. Byron: Is that Admiral?

The Witness: That's Admiral. And at the right it is "Yes" because there is only one in the Potter. Then the 8 in between it refers to the handling of the refrigerant—refrigerant or refrigerants. It calls for a "Single liquefying [1337] unit associated with said expanders constructed and arranged to condense refrigerant expanded by heat extracted from

(Testimony of Glenn Muffly.)

both said compartments." In that case there is a "Yes" at the right for the Potter because there is only one condensing unit. And at the left there it says "No," there are two because there are two liquefying units instead of one. The first liquefying unit we see in the base consisting of the lead condenser and that is the one for the primary. The second condenser we see in the rectangle having the yellow lines on it in the Admiral, that is the condenser of the secondary circuit.

Q. (By Mr. Ramsey): Will you point to physical Exhibit 117 to the condenser?

The Witness: The condenser is this plate (indicating) or properly the tubes that are attached to this plate, and they go—loop back and forth and then lead to this (indicating) as you see in the drawing, this tube here between the plates and the liner.

Q. Why do they call that a condenser?

A. Because its function is to condense the volatile refrigerant which evaporates in the secondary evaporator.

Q. It might be helpful if you would explain briefly the manner in which it evaporates in connection with that secondary circuit.

A. The refrigerant is sealed within this system of tubing [1338] which includes the evaporator around the liner and the condenser on this secondary plate. The refrigerant having been condensed flows through the center where there is a C leading in this vertical tube, goes down to the bottom and

(Testimony of Glenn Muffly.)

that is a path for liquid to flow from the condenser down from that out into these tubes, and as it evaporates it becomes lighter, the bubbles help it to rise, so it flows up again, and that vapor or mixed vapor and liquid passes into the condenser at the top and by gravity flows down here as it condenses. That is cooled by contact with this primary plate, which is way down below, zero, being just as cold as the evaporator that cools the freezer.

Q. Does the refrigerant ever leave that secondary circuit?

A. No. That refrigerant is sealed within this system of tubing and remains there for the life of the refrigerator.

Q. Will you next consider Element 9?

The Court: Before you do it, I was wondering: Opposite Element No. 5 you say "No. Is a function of thermostat." Opposite Element No. 6 with reference to the Potter and Bronaugh you say "No. Is a function of expansion valve." Is a expansion valve and a thermostat the same thing?

A. No; they are two separate things. In the Potter patent it is maintained at the—freezing compartment temperature is regulated by the expansion valve and the cooling compartment temperature is regulated by the thermostat 31. And in that [1339] Mr. Potter is more or less correct.

The explanation of why, he says that the expansion valve determines the pressure at which refrigerant evaporates in his freezer evaporator and, of course, having a presure at, say, five pounds—that's

(Testimony of Glenn Muffly.)

some 8 below zero—that determines that any refrigerant which evaporates in that coil evaporates at 8 degrees below zero.

So he is correct in saying that that expansion valve setting determines the temperature at which the refrigerant evaporates in the coil. He is not quite correct in saying it determines the temperature of the compartment adjacent because that would depend upon what they put in it in heat.

Now, after this is cooled and the refrigerant flows into that upper compartment, the evaporator 25, ultimately that would also come down to 8 degrees below zero and he has no control on that itself, but he does have a thermostat near it, and that stops the system before you freeze the materials in the upper compartment. [1340]

Q. Considering element 9 of the claim on 114-A, would you read it?

A. I will read it to you. Item 9 refers to volatile refrigerant circulating through said expanders being the sole heat-extracting medium.

Now, on the right-hand side I have said "Yes" because there was only one refrigerant in the Potter refrigerator, and it is the sole heat-extracting medium. At the left I have marked it "No" because there are two refrigerants in two separate systems in the Admiral refrigerator.

The Court: When you refer to the left you refer to Admiral, and when you refer to the right you refer to Potter; is that not right?

(Testimony of Glenn Muffly.)

The Witness: Yes. I sometimes forget to mention the names.

The Court: The record will so show.

The Witness: Yes.

Mr. Ramsey: I wonder if we can refer—did you finish your answer, sir? A. Regarding No. 9?

Q. Yes. A. Yes.

Q. I wonder if we can refer to 114-B.

The Court: Have these been admitted?

Mr. Ramsey: They have all been admited. First off, [1341] would you please say under whose directions these several Exhibits 114-A to 114-L were prepared?

A. They were all prepared under my direct supervision. I made the original sketches and checked the work of the draftsmen, and I added these notes at the right and the left to indentify and the lead lines that point to he various parts of the Admiral at the left and Potter at the right.

Q. This one refers to Claim 4 of the patent in suit? A. Yes.

Q. Without repeating yourself too much and commenting only on the points of difference between Claim 4 and Claim 2, would you explain your legends and your interpretation of Claim 4?

A. Yes, the first items are identical, and the difference between these two claims is mainly down here in Item 10 which we touched on only as a thermostat on the first chart. This has under the Item 10 thermostat, and at the left we first say "Yes" for the Admiral and "Yes" for the Potter

(Testimony of Glenn Muffly.)

because there are thermostats. There is a thermostat in each, but the next section of that reads, "Responsive to the temperature of said cooling compartment and controlling the on-off cycles of said liquefying unit in response to said temperature." I have marked it "Yes" at the right for Potter. I have marked it "No" at the left for Admiral.

The reason is that this thermostat that is [1342] not within the cooling compartment but back of it responds to the liner temperature. That would be the nearest equivalent of thermostat 31 of Potter. That is the thermostat which controls temperature of the main compartment, but that thermostat does not control the system in the base, the stopping and starting.

In Potter the thermostat is a switch that stops and starts the motor. In the Admiral this thermostat is effective in opening and closing a valve which determines whether or not the secondary is cooled.

Q. I wonder if we might have physical Exhibit 117-A brought over so that the jury can see it and you can point out the physical parts.

(Physical exhibit referred to produced before the jury.)

Q. Can you point out on that physical exhibit physically where is that thermostat you are talking about?

A. This valve which does the controlling of the secondary system is in the tubing, and we see it

(Testimony of Glenn Muffly.)

here (indicating). Now, the location in the drawing in the Admiral refrigerator in the middle just above the green coil of the primary plate you see this device here. It is an electrically operated valve. That electrically operated valve is here on the tubing at the back adjacent to the primary plate of the Admiral asembly which goes with the primary system 117-A [1343] exhibit. Does that answer the question?

Q. Yes. Would you comment and read, the first line says. "Responsive to the temperature in the cooling compartment." To what is that responsive in the accused device, Admiral?

A. In Admiral that is responsive to this thermostatic bulb that is located adjacent to the secondary coil that cools the main food compartment. It is located outside of the coil but against the wall of it.

Q. Which compartment are you pointing to?

A. I am pointing to the main food compartment in the Admiral refrigerator, and that bulb controls a thermostatic switch that in turn controls the valve. I think maybe you want me to speak of the other bulb on the freezer?

A. Yes, that is right.

Q. Now, the bulb in the drawing of the Admiral refrigerator, we see at the top a heavy black line that runs to the left back of the freezer liner, and that connects with a little box here that indicates a thermostatic control that opens and closes the electrical circuit that goes to the motor inside of

(Testimony of Glenn Muffly.)

this sealed unit. That is a motor compressor unit, so the temperature on the back of the liner of the freezer, in other words, this location here, on this controls that valve. The reason you do not see it here is that the electrical part is not mounted. There is an electrical coil surrounding this solenoid, this valve—it is called [1344] solenoid—that is connected with a switch that responds to the temperature of the bulb, responds to the freezer temperature.

Q. Now, the last element or the second in No. 10 you have a marking of "Vague." Would you explain that?

A. Yes. That refers to thermal insulation around said cooling compartment having less resistance to flow of the heat thereto from the outside atmosphere than does the thermal insulation of the freezing compartment. That is the first part of that block of "Vague." Now, that is vague for the reason that it does not specify whether they are talking about the total heat that flows in or the heat that flows through a given square foot of wall, and so we do not know. We do know from general proportions that more heat does flow in total amount of heat into the upper compartment that flows into the lower compartment.

In the Admiral it is likewise true, there is more heat flows into the cooling compartment than flows into the freezer for the reason it is so much larger, so much more wall.

Now, the balance of that, reading this last part

(Testimony of Glenn Muffly.)

of Claim 4, the last phrase of it, "To insure starting of said liquefying unit by heat flowing into said cooling compartment during an off-cycle of said liquefying unit before the temperature in said freezing compartment approaches [1345] a non-freezing value."

I have marked that "Vague" because that infers, that wording infers that because this thermostat is in the cooling compartment you insure cooling of the freezer, and that is incorrect as I will explain.

Q. Give your explanation.

A. The vagueness merely prevents us from applying it to the Admiral, but we do know that the thermostat is not in the same place so that this cannot apply to the Admiral having no such thermostat in the food compartment.

Q. Does that complete your answer?

A. I might go ahead to say why.

The Court: Go ahead.

The Witness: This Potter refrigerator, as Mr. Potter discovered a little later, if you set it on a back porch, as many people did in the early days of electric refrigerators, and the weather goes down to about 50 degrees and you have this bottom full of frozen food, the frozen food will thaw out. Now, that is a mystery to many housewives and to the public as to why a refrigerator that makes ice rapidly on a hot day fails to make ice on a cool day. There is a natural reason. If this thermostat in the

(Testimony of Glenn Muffly.)

Potter refrigerator which controls that temperature to around 40 degrees is only operated every five or six hours or maybe skipping a whole 24 hours because the weather, the room— [1346] ambient atmosphere we call it—is just as cold as the inside, almost as cold as the inside of the refrigerator, so it don't have to start often enough to keep the frozen food frozen, and you have a condition of a failure to maintain frozen foods.

Later, after some experience in production, there was another thermostat put in Potter refrigerators. We do not see it here.

Mr. Cuningham: If your Honor please, I move to strike the word "later" from the answer. "Mr. Potter discovered it later," I don't know how he knows this, how he knows when Mr. Potter discovered it, how he knows Mr. Potter discovered it.

The Court: Do the two thermostats appear in the Bronaugh and Potter specifications or drawings?

The Witness: No, no.

Mr. Cuningham: Yes, your Honor.

Mr. Byron: Don't interrupt the witness.

Mr. Cuningham: I am sorry.

The Court: That is a question of fact. Go ahead.

Mr. Ramsey: May we refer now to 114-C and very shortly thereafter D.

(Exhibits referred to produced before the jury.)

Q. (By Mr. Ramsey): This exhibit reads,

(Testimony of Glenn Muffly.)

"Claim 2 does not [1347] read on Amana." On the left is a picture marked "Amana." On the right is the patent drawing of the patent in suit. Are you familiar with the Amana refrigerator?

A. Yes.

Q. The accused device? A. Yes.

Q. Does that sketch pictured on the left-hand side correctly portray it? A. It does.

Q. Does your analysis of Claim 2 of the patent in suit with regard to Amana corerspond to your analysis of the Admiral? A. It does.

Q. Do you have any further comment to make?

A. Amana and the Admiral are substantially the same so far as we are concerned with this.

Q. Will you next refer to 114-D? Are you familiar with 114-D? A. Yes.

Q. It is marked, "Claim 4 does not read on Amana," and shows the Amana structure and the Bronaugh. If I were to ask you the same questions with regard to 114-D as relating to Amana that I did with regard to the Admiral structure, would or would not your answers be the same?

A. My answers would be the same. [1348]

Q. Thank you. Let us proceed to 114-E. On this, on the left-hand side is the Anderson patent 1,439,051, and the other the Potter or patent in suit. Will you explain this quite briefly and describe the legends and the reasons for your conclusions?

A. Yes, that first No. 1 is obvious; both cabinets. No. 2, a cooling compartment, it points in the An-

(Testimony of Glenn Muffly.)

derson to the compartment 6. It points to the right to the compartment 14 of the Potter.

The next item, No. 3, a freezing compartment, the lead line pointing to Anderson's compartment 7 and the lead line pointing to the right to Bronaugh and Potter's compartment 13, which includes 12, 12 being within 13. The thermal insulation points to the left, an insulated wall of Anderson, and to the right to the insulated wall of Potter. It is around said compartments, and it insulates them apart.

Item 5, a cooling refrigerant expander having heat-conducting surfaces within said cooling compartment, and that points to the coil that is wrapped around the, back and forth, coil 40, which is on the rear wall, on the side walls and on the inside of the liner of the main food compartment 6, and at the right this cooling refrigerant expander is the coil 23 within Potter's compartment 14. Below that we have a phrase saying: [1349]

> "Constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees F. and is maintained at a humidity whose relative value is at least 100 at 32 degrees F."

This merely says at the left same as Potter, at the right same as Anderson. That means the effect is the same. They both have cold inside of the food

(Testimony of Glenn Muffly.)

compartment. They both operate at a frosting-defrosting type of cycle. They are both quite high in humidity, and, so far as this wording is concerned, they are the same.

Below that was 6, "a freezing refrigerant expander having heat-conducting surfaces within said freezing compartment," points to coil 22 at the right for Potter and to the left the coil 34 within the freezing compartment 7 of Anderson.

Below that, a single liquefying unit associated with said expanders and constructed and arranged to contain refrigerant expanded by heat extracted from both said compartments.

"Yes" on both sides because this cooling is continuous throughout the freezer cooling system, through the main food space cooling compartment and back of the compressor. [1350]

A. I pointed to Anderson, and I now point to Potter, and the same thing is true. The coil goes into a freezer coil after and expands in series to coil 23 within the main food compartment, the coil returning then to the compressor.

Next, Item 9, a volatile refrigerant circulating through said expander, being the sole heat-extracting medium.

I marked it "Yes" on both sides because it is one refrigerant circulating through both of these refrigerators.

And the last item, a thermostat responsive to a temperature in one of the compartments controlling the operation of the liquefying units. On the

(Testimony of Glenn Muffly.)

right we say "Yes" for Potter and point to the control 31 which is located in the warmer compartment 14. At the left we refer to page and line of the specification of Anderson which tells us that there is a thermostat mounted on a vertical member between the two doors within this warmer compartment, so Anderson put his thermostat in the same location that Potter had his thermostat, in the warmer compartment.

Q. I was referring to 114-F. The title of this exhibit is "Anderson in '18." It portrays all the Poter Claim 4, and this is a parsed form of Claim 4. You have previously described the functions between Claim 4 and Claim 2. With that in mind, will you describe this exhibit, please?

A. This substantially duplicates the other chart, the [1351] previous chart, but when we get down to the bottom where we had this additional wording and that refers to insulation relationship between the two compartments, it is marked "Vague" on both sides because the words themselves are vague, do not tell us exactly how that is done, but in either of these it is true that heat will leak into the warmer compartment faster than it leaks into the colder compartment. That is because there is so much more wall area, and it will leak into the warmer compartment than leak into the freezer, and in both cases they put the control in the warmer compartment. [1352]

Q. (By Mr. Ramsey): May we pass now to

(Testimony of Glenn Muffly.)

Defendants' Exhibit 114-G. This is "Gibson filed before B & P" is like Potter Claim 2.

The Court: Like Admiral.

Mr. Ramsey: Like Admiral. Pardon me. Claim 2 on the left is the Gibson patent Reissue 21,941; on the right Admiral. Would you please explain—do you know the operation of the refrigerator shown in the Gibson patent? A. Yes.

The Court: Which one is it?

Mr. Ramsey: Will you please explain that to the jury?

Mr. Cuningham: If your Honor please, may the record likewise show the subtitle and I quote, "Claim 2 Bronaugh-Potter Re. 23,058"?

Q. (By Mr. Ramsey): That's the patent in suit, is it not, Mr. Muffly?

A. That's Potter patent in suit 23,058. It identifies the wording that this is Claim 2 from the patent in suit.

The Court: I don't understand that.

The Witness: It refers to a small wording at the top that says, "Claim 2 Bronaugh and Potter Reissue 23,058." That is the wording of this claim and it's marked at the top—should be—on the chart. That's merely the identification it records.

Q. (By Mr. Ramsey): Similar to the title on all the exhibits? A. They are marked. [1353]

The Court: All these legends and these statements were prepared by you?

A. That's right.

The Court: You merely took the patent and re-

(Testimony of Glenn Muffly.)

produced them on these various sheets except with Admiral and Amana, and you reproduced a copy of the box on the left-hand side of the sheet?

A. That's right.

The Court: All right.

The Witness: And added the notes of "Yes" and "No" and explantion. But the material in the center is word-for-word of the claims in suit. We used Claim 2 and Claim 4 as typical, thinking it would be unnecessary to do the same thing with 1 and 3.

The Court: And are you now comparing Bronaugh and Potter Claim 2 with Gibson and with Admiral?

A. Correct. I am using Claim 2 of Bronaugh and Potter patent to show how these—this claim would read on Admiral and to what extent and that it would also read on Gibson.

The Court: All right.

Mr. Byron: You mean to show how these claims will or will not read?

A. I said to what extent what portion of the claim would fit each. It does not read 100 per cent, but it does show the similarity of Gibson and Admiral. The Gibson patent [1354] and Admiral refrigerator are substantially identical in principle.

Q. (By Mr. Ramsey): Would you explain the operation of the Gibson patent? A. Gibson?

Q. How it operates?

A. Yes. The Gibson patent, Reissue 21,941, shown at the left of the chart has, commencing at the base

(Testimony of Glenn Muffly.)

with the condenser colored red, a tube leading up to the upper compartment where we see some green tubing. That is the evaporator within the freezing compartment which is the upper compartment of Gibson. This green portion constitutes the evaporator of the primary system and the suction tube leads—leads from it at 55—the tube is numbered 55 near the compressor at the base.

Compressor 60, that is a suction line completing the circuit—the primary circuit just as we trace the primary circuit in red and green on the Admiral.

Now, in addition to that there is an evaporator which surrounds the liner of the main food compartment 26 of Gibson and that coil is marked 27, and that coil is an evaporator of the secondary system and it does the work of cooling this liner which is known as the cold wall type of refrigerator.

The vapor from the evaporator goes up and down [1355] through this coiled tubing which is colored yellow, that constituting the condenser of the secondary system, and the liquid runs back down and again circulates around the liner to cool the main food compartment. That type of refrigerator is the Frigidaire cold wall. Mr. Gibson is with Frigidaire.

Q. Would it help you to refer to 114-N that you have previously used to illustrate your point?

A. Yes. This is another drawing from the Gibsont patent. The drawing we have here shows the refrigerator as a whole. This is another drawing

(Testimony of Glenn Muffly.)

from the same patent. It shows a liner and tubing surrounding the liner and leading up, and that corresponds to this exhibit, Admiral Exhibit 117.

The cold wall is a liner which is surrounded by this tubing 68 coming up through the tubes 83 and 78, which lead to and from this coil 80 which is cooled by the primary refrigerant in the freezer. Liquid runs down and around and evaporates and comes up condensed again. That is one of the very well known refrigerators.

Q. Now, following that explanation, Mr. Muffly, will you discuss this 114-G which is on the easel?

A. Yes. Taking this Gibson refrigerator at the left and the Admiral at the right, and comparing how this claim would read on them or failed to read on them, we have the cabinet, both sides, cooling compartment on both sides, freezing [1356] compartment on both sides, thermal insulation on both of them, a cooling refrigerant expander "Yes"—or there is an expander pointed to, but the next line saying "Surfaces within the cooling compartment," it is "No" on both sides because that coil is not in the cooling compartment in either the Gibson refrigerator or the Admiral refrigerator.

And Gibson is Mr. Gibson of Frigidaire, not the Gibson refrigerator. There is a make of refrigerator called Gibson. This item continues "wherein constructed and arranged to maintain heat conducting surfaces above 32," of Drawing 8, "whereby the cooling compartment is cooled thereby" and they have a humidity value.

(Testimony of Glenn Muffly.)

Now, that again is over here in the right, and it says "No. It's a function of the thermostat." Now, we have covered that before in connection with Admiral, that this temperature—and what the evaporator does is a function of the thermostat rather than of the way you make the vapor itself. Having an evaporator you can run it either warm or cold.

At the left is a little different because Mr. Gibson provided a different means for controlling his temperature and he had it explained in his patent specification, the reference being to page 2, Column 1, Line 58-62. There is air injected into the system which gives him a limiting factor of control. [1357]

Q. You might explain a little more the air injected in what manner?

A. The chart of the secondary system consists of a refrigerant such as F-12 with some air or noncondensable gas added to it. That is done sometimes to change the characteristics of a refrigerant and mix something with it.

Q. It is your contention, I gather, that that mixture is the thing that produces the effect of the maintenance of temperature in Gibson?

A. Yes. That is as explained in the Gibson patent.

The Court: Gibson patent is described on the left-hand side of the sheet and Admiral on the right-hand side? A. Yes, Yes, right.

Now, there is a difference at the next step: "A freezing refrigerant expander having heat conduct-

(Testimony of Glenn Muffly.)

ing surfaces within said freezing compartment." At the left it says "Yes" for Gibson because obviously this freezing refrigerant expander is within the freezing compartment, whereas at the right I have said "No" because the Admiral freezing refrigerant expander is outside of the freezer—the freezing compartment.

Then the one about "constructed and arranged to maintain heat conducting surfaces at certain temperatures" and on both sides I have said "No. It is a function of"—at the right for Admiral "a function of the thermostat." [1358] And that is the thermostat that controls the freezer temperature by stopping and starting the motor compressor.

Now, at the left "No. Is a function of low pressure switch." Now, it happened that Mr. Gibson showed a different type of thermostat and it's known as a low pressure switch. It does the same thing but it does it without having any bulb above here in the freezer. The principle is an old one. It's done by the pressure of the suction vapor as it comes back to the compressor, and that reflects directly the temperature of the refrigerant in the freezing evaporator.

Item 7 "Volatile refrigerant in said expanders," yes, there is volatile refrigerant in both expanders. But when it comes to a single liquefying unit associated with said expanders, we have—I marked it "No." There are two both at right and left because both in Gibson and in Admiral there are two con-

(Testimony of Glenn Muffly.)

densers, one in the base of the cabinet and in one that is cooled by the primary evaporator—that is, in the secondary system that cools the main food compartment.

Q. Do you have any reference characters for that?

A. The secondary condenser of Gibson is 80. The secondary condenser of the Admiral is the portion with the yellow color on the the rectangular plate we have been referring to before.

The Court: I think we have been going now for an hour [1359] and 20 minutes, and this is a good time to take a short break. Take a recess for about 10 minutes.

(Whereupon the jury was excused for a recess.)

(The following proceedings were held out of the presence of the jury:)

The Court: In this legend that you have here, "Gibson filed before B & P" is like Admiral. I was just going to ask you a question. If Admiral follows Gibson but Gibson and Potter anticipate each other, can Admiral be exonerated by reason thereof if Potter proves the date of his invention was prior to the filing date of the Gibson?

Mr. Byron: Well, there are two entirely different types. First may I explain—two entirely different types of refrigerator. The Admiral and the Gibson are cold wall type of refrigerators, whereas

(Testimony of Glenn Muffly.)

Bronaugh and Potter patent are the finned coil type. Now, then, if the claims in the Potter patent were broad enough to cover Admiral they would likewise cover Gibson—that's an answer to your question—assuming that Bronaugh and Potter patent is earlier in conception reduction to practice to Gibson. But we are citing, comparing these two because they are two entirely different types and recognized as different types, and our position is that the claims of the patent in suit do not read on Gibson and they do not read upon Admiral for the same reason. [1360]

The Court: Yes. But then you don't cite Gibson as anticipating——

Mr. Byron: That's right; we do not.

The Court: ——Bronaugh and Potter. That's what I wanted to know.

Mr. Byron: Yes.

The Court: Now, I would like to find out something else. Mr. Muffly says that Item No. 5 in Claim 2, for example, doesn't read on Potter. I mean, it's a misdescription. What does that mean? What does it mean when it's surplusage or it's incorrect? Does that invalidate the patent?

The Witness: Well, I am not qualified——

The Court: I am not talking to you. I am talking to Mr. Byron.

Mr. Byron: Well, I was thinking that the witness was going to answer, and I wasn't paying too much attention, your Honor, or I want to make sure that I do have the question.

(Testimony of Glenn Muffly.)

The Court: The question is, Mr. Muffly testified that Item No. 5 in these exhibits—earlier exhibits, which is a portion of the claim of Potter——

Mr. Byron: That's right.

The Court: ——is incorrect and when applied to the structure of the Bronaugh doesn't mean anything.

Mr. Byron: That's right.

The Court: All right. Now, the question I am asking, [1361] assuming that to be true, does that invalidate the Bronaugh-Potter patent?

Mr. Byron: Yes, it does, because it's a functional statement and it's an incorrect statement, and invalidates that claim.

The Court: Leave out the functionality of it.

Mr. Byron: That claim is indefinite and non-descriptive and therefore invalid.

This is Title 35, Section 112 of the statute.

The Court: I know the statute requires it to be set out definitely and with precision and all that, but suppose they describe a function or a purpose that is immaterial actually because Mr. Muffly has already testified that he could construct a box from the description and the drawings of the Potter. He said he could make a box.

Mr. Byron: Yes. But it wouldn't be the box as interpreted by Potter and as claimed by Potter, and it wouldn't be—for example, if Mr. Muffly were going to construct a box based upon the drawing of the patent in suit, he wouldn't have any finned coils in there. As he has said, he would have something

(Testimony of Glenn Muffly.)

else, a brine tank, because he doesn't know what those—that rectangle is sticking up there means and nobody else would know, according to Mr. Muffly.

Therefore he could construct something but it might be incorrect on his interpretation. [1362]

The Court: And is it your point that if Mr. Muffly would construct according to the specifications and the drawings it wouldn't be the box described in the claims?

Mr. Byron: That's right; it would not be.

The Court: But, Mr. Cuningham has said that, of course, they didn't describe finned coils because they didn't even claim it and their claim is broader by reason of the fact that they didn't claim finned coils.

Mr. Byron: But they do not claim any structure which will do that. That's the point.

The Court: They don't claim where, in the claims or in the——

Mr. Byron: In the specifications they do not and in the drawings they do not. They do not describe any coil constructed or arranged in any manner to produce those results. That's the point.

The Court: Now, that comes to my next point: What is the correlation between the drawings, the descriptions, and the claims? Now, Mr. Cuningham has submited a form of instruction which says that the patent is made up of these three iter s. It's been approved by Mr. Kolisch and Mr. Lucas, they both approved that instruction. Now, Mr. Parker said,

(Testimony of Glenn Muffly.)

when he looked at that drawing, he could see that it is a finned coil or such. Now, is a finned coil necessary, or some similar structure necessary in order to maintain the [1363] validity of the patent in suit?

Mr. Byron: It is, yes, sir.

The Court: Why?

Mr. Byron: Because otherwise there is not the proper disclosure of it. Now, just let me read this one section again. This is Section 112.

"The specification shall contain"—and this is mandatory——

> "The specification shall contain a written description of the invention and of the manner and process of making and using it in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains or with which it is most nearly connected to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention."

Now, this section is related directly and to nothing else but the specification, the description in the patent.

The Court: Will the Potter box do what Potter said it will do in his claims without the finned coil?

Mr. Byron: No, it will not, just like Anderson. But I might go on to say about Anderson, by virtue of his larger coils and more expansive coils, longer,

(Testimony of Glenn Muffly.)

he will accomplish the same results as though he did have finned coils. [1364]

The Court: Well, what about that? Does that make Anderson anticipate because he arrives at the same result in a different manner?

Mr. Byron: Yes. Exactly the same manner.

The Court: I thought you just told me it's a larger box.

Mr. Byron: Oh, no. I said the coils are larger.

The Court: Larger area allows more heat inflow in a freezer in warmer room temperatures?

Mr. Byron: See, these coils, your Honor, are much larger in the Anderson box, Defendants' Exhibit 115, than the coils which you cannot see in the Potter box.

The Court: What about that? How about that identity rule for infringement?

Mr. Byron: Yes. The identity are these: There must be identity of structure, identity in functioning, and identity in result.

The Court: Does that apply—that doesn't apply?

Mr. Byron: That applies only to infringement.

The Court: Well, how about the validity and anticipation?

Mr. Byron: I mean, to find infringement you have got to find identity in structure—that is, substantial identity in structure, substantial identity in functioning, and substantial identity in result.

The Court: And are you of the opinion that I should [1365] instruct the jury that if from an ex-

(Testimony of Glenn Muffly.)

amination of the description and the drawings a person skilled in the arts in 1929 or '31 would not have known that Potter had in mind a finned coil, then they must find the patent invalid?

Mr. Byron: That's right.

The Court: Is that correct, Mr. Cuningham?

Mr. Cuningham: Your Honor, I am not trying to evade, but I would like to have the question read. I'm sorry.

The Court: Will you read that question to Mr. Cuningham?

(The Court's question propounded to Mr. Byron above was read.)

Mr. Cuningham: Your Honor, a finned coil or its equivalent, because it's not limited to a finned coil. I would agree with that. The testimony is——

The Court: A finned coil or similar device?

Mr. Cuningham: Yes. Brine tank or cold surface; extended surface is the best term I can now think of.

Mr. Byron: It's not in the claim.

Mr. Cuningham: I think it is.

The Court: Assume something is disclosed in the drawing which is not disclosed in the description, what about that?

Mr. Byron: Then it's void, absolutely. The statute is mandatory on written description in the specifications.

The Court: Well, what about this question of comparative insulation which was put into the speci-

(Testimony of Glenn Muffly.)

fication some two or [1366] three years later? I understand from Mr. Muffly that the original drawing showed it and he could have constructed as follows—constructed a box with this differential insulation, but it's not shown in the description. Am I correct in that?

Mr. Byron: That's right.

The Court: All right. Now, what does that mean?

Mr. Byron: And it wasn't claimed either. It means that there is late claim. They claimed here more than two years after a device with this differential insulation was made and sold and thereafter by virtue of this late claiming those claims are invalid on the differential insulation.

The Court: And does that make the patent void?

Mr. Byron: Yes, it does, as to those particular claims calling for the differential insulation. Claims 3 and 4. [1367]

The Court: What should I submit to the jury?

Mr. Byron: Well, if they find that this Potter display embodying the differential insulation was sold more than two years, made and sold more than two years prior to the time of that amendment——

The Court: Wait a minute. The record shows that it was inserted more than two years after the first filing.

Mr. Byron: Then that is sufficient to invalidate——

The Court: You claim that you are entitled to that as a matter of law?

Mr. Byron: That is right.

(Testimony of Glenn Muffly.)

The Court. What about that, Mr. Cuningham?

Mr. Cuningham: I feel, your Honor, I think that is 150 per cent wrong.

The Court: It just has to be 100 per cent wrong.

Mr. Cuningham: The reason I say 150 is because I think it is clearly wrong on the law. The Muncie Gear case—and I hope to have a memorandum and a very brief one on it—is the chief one that is relied upon by Mr. Byron. It boils down to this, your Honor, that it is a matter simply of the disclosure, original disclosure, and, of course, and everybody knows this, you can change a claim as you come within that. The Muncie Gear case, in that case they added a lot of new matter, and that is not true in this case.

The Court: Do you have any authority to indicate that [1368] you can at a later time after the expiration of two years include in the description matters which were shown in the drawings but which were not set forth in the description?

Mr. Cuningham: Oh, yes, your Honor; and, furthermore, it is not only the specification and the drawings, but it is the original claim that are a part of the specification, and there is another angle——

The Court: Well, as I understand it, they did not claim differential insulation in the earlier claims.

Mr. Byron: That is correct.

Mr. Cuningham: It is not a matter of claiming, your Honor. I did not mean to make a confusing statement. I say that a claim which is supported

(Testimony of Glenn Muffly.)

by the drawing, the specification, or by the original claims.

The Court: Do you use the word "or"? Did you say "or"?

Mr. Cuningham: I did, sir.

The Court: Very well.

Mr. Cuningham: Well, I think the word "or" is right and also if it shows that you are claiming it—that is perhaps not too clear——

The Court: Will you give me a case some time today, any time today, but just give me a case to support you? Perhaps Mr. Cheatham can find a case.

Mr. Cheatham: We have thought about it. We have been so busy. It is a question of [1369] getting——

The Court: Give a citation. All I need is a citation.

(Discussion off the record.)

Mr. Cuningham: We will, sir.

The Court: We will take about a five-minute recess.

(Short recess.)

(Thereupon, the jury returned from recess and the following proceedings were had in its presence.)

GLENN MUFFLY

a witness in behalf of Defendants, thereupon resumed the stand and was examined and testified further as follows:

Direct Examination
(Continued)

By Mr. Ramsey:

The Court: I discussed with counsel the question that was propounded by one of the jurors, I think Mr. Duyck, as to whether the members of the jury had the privilege of asking a witness a question. Now, ordinarily, we try to discourage this sort of thing because usually the lawyers bring out everything that should be brought out, but sometimes they make mistakes, and, as you have noticed, I have asked questions from time to time because I was not clear on some of the things that the witness was testifying to, and it was for that reason I discussed this with counsel for both [1370] plaintiff and defendants, and they said it is perfectly all right if someone has a question that they would like to ask a witness, that they may do so. Just state to me the question that you want to ask, and I will listen to the question, and then I will determine whether it is proper, a proper question, or not.

Juror Duyck: My question, your Honor, was academic rather than something I had in mind.

The Court: If Mr. Muffly is here after you decide the case, then you can talk to him, but do not talk to him before the case is over. Go ahead, Mr. Muffly. You were discussing, I believe, Gibson.

(Testimony of Glenn Muffly.)

The Witness: Yes, right.

Mr. Ramsey: 114-J.

The Witness: And I was pretty well along with the comparison. I had, was just on explanation of the, I think that this control of the Gibson refrigerator was different but accomplished the same thing that we had in the Admiral by having a bulb up here responsive to the temperature of the freezer and that control is the control that starts and stops the motor.

Now, Gibson has a control that starts and stops the motor, but it has no bulb up here in the freezer, but it is just as good as having a bulb because it is connected to the freezer line that is part of the suction that goes [1371] back up there so it reflects the temperature of the refrigerant that is inside of the primary evaporator itself, so it is just as if the whole primary evaporator were made into the bulb of this control down here, so in both cases the sensing of the temperature of the freezer is the thing that controls the starting and stopping of the motor.

Now, they both have control but a different type of control of controlling the secondary. In the Admiral there is a sensing device that is on the outside of the liner of the main food space that reffects temperature of the main food space, and that operates a switch, and the switch in turn operates a valve that starts and stops the cooling of the secondary system that surrounds the liner of the main food compartment.

Q. Referring to 117, Exhibit 117?

(Testimony of Glenn Muffly.)

A. Referring to Exhibit 117, yes, where we see those coils. Now, this—we have gotten down here to the point that on this side is a function of the low-pressure control here with the thermostat, and then we come to a volatile refrigerant in the expander. I have said "Yes" both sides because there is volatile refrigerant, but at the next point, a single liquefying unit, the answer is "No" to Gibson and "No" to Admiral because each has two liquefying units, the primary system liquefying unit in the base, the secondary liquefying unit is the yellow coil of the Gibson within that tank. The coil [1372] is marked 80, and in Admiral we have this yellow coil on the plate of the secondary condenser.

Now, the next item, No. 9, which says "No" for both Gibson and Admiral because one volatile refrigerant circulates through said expanders, circulating through said expanders, is not the sole heat-extracting medium. There are two volatile refrigerants, both heating and extracting mediums, so in that respect Gibson and Admiral are alike.

The thermostat responsive to the temperature in one of said compartments, this claim does not specify which of the compartments controls the liquefying unit. Well, now, in both Gibson and Admiral there is a thermostat that starts and stops the motor that drive the primary compressor so the answer is "Yes" for both.

Q. Have you completed your explanation of that to the jury? A. Yes.

(Testimony of Glenn Muffly.)

Q. I wonder if we might have Exhibit 114-H? (Exhibit referred to produced.)

Q. This covers Claims 4 and refers to the Gibson-Admiral drawings as part of Claim 2 in suit. Will you treat that the same as you did the others without repeating the parts that are common in Claims 2 and 4?

A. Claim 4 reads on Gibson and Admiral alike until we get down here to the thermostat, and it says, "Responsive to the temperature in said cooling compartment." [1373]

Now, the answer is: "No." I have marked it "No" on both sides because neither Gibson nor Admiral has a thermostat responsive to the temperature of the cooling compartment to control the on-off cycles of said liquefying unit, being the primary liquefying unit.

In both Gibson and Admiral that control of the liquefying unit is in response to the temperature of the primary or freezer.

Then a continuation of that goes into the thermal insulation, around the cooling compartments, and so forth, and that is marked "Vague" on both sides. It don't make no sense to me, but whatever it does say, it applies to Gibson just the same as it applies to Admiral, to the same extent.

Q. Have you completed? A. Yes.

Q. Do you remember the exhibits that you prepared and identified, that were identified and introduced as 114-I and 114-J, comparing Gibson to

(Testimony of Glenn Muffly.)

the Claims 2 and 4 of Bronaugh and Potter and Amana? A. Yes.

Q. Could you say whether your answers are the same with regard to Amana as you have answered with regard to Admiral?

A. That would be the same.

Q. We will skip that explanation. May we have 114-K? [1374]

The Court: 114-K?

Mr. Ramsey: Yes, 114-K.

(Exhibit referred to produced.)

Mr. Ramsey: And might we have the Larkin Patent, Exhibit 106?

The Witness: I have a copy of it.

(Discussion off the record.)

Mr. Ramsey: This is a comparison drawing of Anderson, 1,439,051; Larkin, 1,776,235, and the patent in suit, 23058. Would you first explain the Larkin patent to the jury?

A. The Larkin patent has several drawings, one of them being of a long showcase with cooling elements in each end, and on this chart, 114-K, we have just one figure, Figure 3, showing one of those cooling elements, and the Larkin patent has to do with the cooling element. This is in Figure 1. It merely shows that kind of a refrigerator, that cooling element, that kind of a refrigerator that that cooling element might be put in.

(Testimony of Glenn Muffly.)

Q. Does he refer in the specification to household refrigerators?

A. Yes, he says, "This invention relates to refrigeration in general and particularly to cooling units adapted for use in display case refrigerators, refrigerator cars, storage rooms, household refrigerators, etc."

Q. Where are you reading? [1375]

A. I am reading from Page 1, Lines 4 to 8, inclusive.

Q. Would you continue your explanation of the Larkin patent?

A. Larkin was in the business of producing this finned coil, and he says in his patent, explaining the virtues of his finned coil, reading from Line 33, Page 1:

"* * * meats lose a great deal of weight by dehydration due to exposure to below-freezing temperature"——

And again at the bottom of that column he mentions "dehydration of the meats," and in the middle of the second column of that patent he refers to "aluminum heat-absorbing plates," or fins that are attached to the coil, and this patent goes on to explain the virtues of having this type of coil with a lot of surface, and in the middle of the chart there is a quotation that reads on Page 2, Line 113, over to Page 3, Line 15, and he reads:

"With the present type of coil properly arranged in the casing, a temperature of 36 degrees F. can be maintained in the casing without frosting the

(Testimony of Glenn Muffly.)

plates at all"—the casing being the refrigerator—"consequently without freezing or dehydrating any of the contents of the casing whatever. The very large surface area and rapid heat absorption of the [1376] aluminum plates all lead to a rapid temperature drop when the unit is in operation. Since this temperature drop is less than two degrees, it follows that each refrigerating cycle of operation must be of very short duration, and, consequently, must greatly reduce the amount of power required to maintain it in operation.

"Whatever little moisture may be picked up from the air in the casing is deposited on the plates; and, because of the large surface area of these plates, must, when condensed, be spread on such plates in a very thin film, which is constantly being removed by the circulating air and returned to the air and meats from which it was taken.

"Where below-freezing temperature must be maintained on the plates, as in prior coolers, it is obvious that any moisture taken from the meats must be condensed and frozen on the plates and cannot be removed therefrom by the circulating air. In this case the meats not only lose weight which must be recovered"——

The Court: "* * * cannot be recovered"—"In this case the meats not only lose weight which cannot be recovered." Didn't you say "which must be recovered"? [1377]

The Witness: "* * * which cannot be recov-

(Testimony of Glenn Muffly.)

ered"—right—"but also deteriorate greatly in quality."

That is referring to what other people did before.

The last paragraph:

"This maintenance of humidity is only one of the most important results flowing from the use of cooling coils designed as disclosed herein."

Mr. Byron: "As disclosed herein."

The Witness: Yes, "as disclosed herein."

Q. (By Mr. Ramsey): Now, referring back to Exhibit 101, which is the file wrapper of the patent which appears in the reissue patents there, was this Larkin patent cited by the Examiner?

A. Yes.

Q. Are you sure about that?

A. No. Wait a minute, the Larkin patent, no.

Q. Do you want to look at the history?

A. I know it was not. I misspoke.

Q. Would you continue?

A. The Larkin, as I mentioned, didn't come from that source.

Q. Have you completed your explanation of the Larkin patent, or are there some other parts that you think the jury should know?

A. There is a pertinent point of the specification of the [1378] Larkin patent.

Q. Not too long?

A. Well, this is short. I am reading from Page 5, Line 87, and starting with Line 93:

"A temperature of 36 degrees F. and be main-

(Testimony of Glenn Muffly.)

tained at the center of the casing by maintaining a temperature of 34 degrees F. on the fins of the cooling units. Since this is above-freezing point, this temperature of 36 degrees can be maintained without frosting the fins."

That is an explanation of the fact that Larkin uses this extended surface to maintain high humidity, no frosting.

Q. Does that complete your explanation of Larkin? A. Yes.

Q. Going back to the final part of 101 again, which is U. S. Patent 2,056,165, I will read it to you. It may recall it to your mind. This appears on Page 88 of the file wrapper and was at the conclusion of the application and the claims submitted at that point. I am now reading:

"We now come to the final group of patents, namely, Lundgaard, 1,909,875; Curtis, 1,921,865, and Barnes, 2,002,389. In each of these patents the purpose is to prevent dehydration of food in one chamber by eliminating any frosting surface [1379] in said chamber, while in the same cabinet there is a sharp freezing chamber. In each case this effect is obtained by employing a chilling element in the colder chamber and using this element to cool air which is circulated about or through the warmer chamber. It is obvious that the new claims avoid these structures by reciting two chilling units, one in each chamber and through which a volatile refrigerant is passed."

Are you familiar with the Lundgaard patent?

(Testimony of Glenn Muffly.)

A. Yes.

Q. Could you explain how it functions, briefly?

A. We have no chart on that. The Lundgaard refrigerator, and we have only this small view (displaying document to the jury), as a freezing compartment down below, and it has a cooling compartment above, the cooling compartment being identified as 46 and up the middle of that cooling compartment is a stock or passage that conducts cold air up and down back to this cooling element in the base, which is contained within the compartment 41. That is the cooling portion of the system, and it is adjacent to the freezer 26-A we see in another view. Compartments adjacent to that, 26-A and 26-B in Figure 7, are freezing compartments in the base of the refrigerator, and from that cold zone air is circulated up and back without mixing with the air in the refrigerator [1380] through a flat stack that has fins on it and a little external jacket around it so that the air circulates through the fins, over the fins within the refrigerator, without mixing with the cooling air that came up, and it is explained that this is above 32 degrees. That is the vital part of it.

Q. Do you remember the details of the other two patents cited in connection with the Lundgaard patent by the Examiner, and the only question is do they correspond generally to your explanation of the Lundgaard patent?

A. Yes, they are the same general idea.

Q. I wonder if you would refer to the Lund-

(Testimony of Glenn Muffly.)

gaard patent again, and if you would read to the jury the matter appearing in the first column of Page 1 of the patent, starting, "Furthermore, the present invention is particularly effective"—which is the last line of Column 1? A. Oh, yes.

Q. And running down to Line 74 of Column 2 of Page 1.

A. 74—no—it reads:

"Furthermore, the present invention is particularly effective in permitting the employment of low freezing temperatures in one part of a [1381] refrigerator."

Furthermore, the present invention is particularly effective in permitting the employment of low freezing temperatures in one part of a refrigerator for the preparation of ice cubes, freezing desserts, or the like, while permitting a substantially higher temperature in the food compartment without having any portion of the wall of the latter or any cooling element in direct heat transfer relation thereto at a temperature as low as freezing temperature. In other words, the food compartment may be provided with a cooler which is a relatively large heat transfer area and which therefore need not have a temperature materially lower than that at which the food compartment should be maintained; that is, substantially above freezing. Accordingly there is but little tendency for moisture to collect upon this cooler with consequent objectionable dehydration of food and there is substan-

(Testimony of Glenn Muffly.)

tially no occurrence of frost in the food compartment under normal operating conditions."

Q. (By Mr. Ramsey): Does that describe moist cold condition in the cooling compartment?

A. It does very clearly.

Q. Now, I would like to ask you whether Lungard patent contains the following elements. Is it a household refrigerator? A. It is.

Q. Which in normal operation provides above freezing moist cold air for preserving in a refrigerated condition foods [1382] susceptible to moisture loss by evaporation? A. It has.

Q. And below freezing dry cold air?

A. Yes.

Q. And a dry cold surface for preserving foods in a frozen condition? A. Yes.

Q. Said refrigerator comprising a cabinet?

A. Yes.

Q. Having a cooling compartment?

A. Yes.

Q. And a freezing compartment? A. Yes.

Q. Thermal insulation around said compartment, thereby insulating said compartments from each other and from the outside atmosphere?

A. Yes.

Q. A cooling refrigerant expander having heat conducting surfaces within said cooling compartment?

A. That's the air circulating flue——

Q. Thank you. Constructed and arranged to maintain——

(Testimony of Glenn Muffly.)

The Court: Was your answer Yes or No?

A. A little slight differential in the use of the word "expanded"—that it's a flue in which air does flow slightly expanded. It's not an evaporator. It is in one sense an [1383] expander but it's not the kind of expander that was referred to in the patent. There is a misuse of the word "expander" in the patent. That's confusing.

Q. (By Mr. Ramsey): Does the air flow under pressure? A. Under slight pressure, yes.

Q. Is it generated by a fan? A. By a fan.

Q. Thank you. Is it constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 degrees Fahrenheit while withdrawing heat from said compartment? A. It is.

Q. Does it have the functional result whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees Fahrenheit and is maintained at a humidity of the relative value of at least 100 degrees at 32 degrees Fahrenheit?

A. It does.

Q. Does it have a freezing refrigerant expander with heat conducting surfaces within the freezing compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature well below 32 degrees while withdrawing heat from said compartment whereby air in said freezing compartment is cooled thereby to a temperature well below 32 degrees? A. Yes; it has that. [1384]

Q. And does it have a cooling element to take care of that freezing compartment? A. Yes.

(Testimony of Glenn Muffly.)

Q. And does it have a thermostat responsive to the temperature in one of the compartments controlling the operation of that freezing apparatus?

A. Yes. It has a thermostat.

Q. Going back to Larkin, does Larkin produce, describe, teach, disclose, moist cold? A. Yes.

Q. That is in the cooling compartment?

A. Yes.

Q. And the cooling compartment is one held around 40 degrees? A. Yes.

Q. More or less? A. Yes.

Q. Is that in the household refrigerator?

A. Yes.

Q. Now, may we take a look at the Potter patent, Exhibit 118, file wrapper?

The Court: The original Potter or the reissue?

Mr. Ramsey: It's for identification, 2,219,789.

Mr. Cuningham: This is subject to my objection, your Honor.

The Court: I don't know what one he is talking about. [1385] Is this the later Potter patent which is supposed to contain admissions?

Mr. Ramsey: That is correct.

The Court: All right. It's not admitted yet. It is marked for identification.

Mr. Ramsey: That is correct.

Q. Are you familiar with this file wrapper, Mr. Muffly?

The Court: You may take your seat, if you want to, Mr. Muffly.

(Testimony of Glenn Muffly.)

(Whereupon, the witness takes the witness stand.)

Q. (By Mr. Ramsey): You are familiar, did you say, with this exhibit and its file wrapper?

A. Yes.

Q. Would you refer to that file wrapper and find, if you can find, some words defining a cooling refrigerant expander having heat conducting surfaces within a cooling compartment?

A. The drawing of this Potter patent 2,219,789 shows a coil 51 having fins 56 in the cooling compartment 41.

Q. When was the patent filed?

A. This application was filed December 29, 1936.

Q. And when was the patent in suit filed, February 15th, 1951? Some five and a half, six years later? A. Yes.

Q. I didn't intend to break your train of thought. You [1386] might explain the similarities.

A. Yes. This—comparing this patent with the patent in suit?

Q. No. Just briefly explain how—what apparatus is disclosed in the claim——

A. This patent—maybe I should hold that up to view. I am not reading it. It's another.

Q. You are showing them United States Patent 2,219,789?

A. Right.

This is merely the drawing and it is a refrigerator having a freezing compartment at the top and main cooling compartment below and referring par-

(Testimony of Glenn Muffly.)

ticularly to Figure 2, which is the one on your right. You can see a finned coil in the lower compartment which is the cooling compartment in this case. The finned coil in the lower compartment and a refrigerated shelf up there in the freezer are shown on the drawing.

Q. What reference number is given to the finned coil?

A. The finned coil is 51, the fins are 56, and that coil is a secondary evaporator and it is associated with the secondary condenser coil 53, which is the lower one of the two coils in this shelf and——

Q. Is the finned coil shown clearly?

A. The finned coil is shown clearly, yes.

Then this shelf that contains the [1387] secondary condenser, the lower one of the two coils, also has an upper coil which is the evaporator of the primary system. And we have a similarity here in this being like Gibson and like Admiral and Amana, there being a secondary system that cools the main food compartment and the machinery is down below.

The other view, Figure 1, is similar, but not quite so easy to follow. The primary coil is the one at the right of the Figure 1, the secondary condenser is the coil in the middle. That's still within the brine tank. And the coil outside here that is marked L and 34 and 37 is the one that cools the warmer compartment, the cooling compartment of the refrigerator.

The Court: All right. Just take your seat.

(Testimony of Glenn Muffly.)

Q. (By Mr. Ramsey): In the file wrapper 118 for identification, was this Gibson patent which you have referred to cited as a reference?

A. The file wrapper of this Potter patent, yes.

Q. And that Gibson patent number is 2,073,741, as was noted then? A. Yes.

Q. And was that cited in the first action of the examiner? I have this here. It has been?

A. I don't have it.

Q. If you want to look at it, I wish you would refer to [1388] page 25 of the file wrapper to confirm this.

The Court: Well, what do you want him to do now, Mr. Ramsey? Haven't you got some other questions you might propound to him? It's almost 12:00 o'clock. During the noon hour you can tell him what portion you want to consider.

Mr. Ramsey: That might be a very good idea.

The Court: Mr. Muffly, I wanted to ask you a question. We have been talking about finned coils, and I wasn't sure whether I understand what a finned coil is. Is this a regular coil 36 and 30? Are those coils?

A. Those are coils.

The Court: And is 51, there bars, these coils, that——

A. The fins are these vertical sheet metal attached to the horizontal running coils 51 that loop back and forth. And that is a finned coil. That's very clearly a finned coil.

The Court: I don't know if the jury all under-

(Testimony of Glenn Muffly.)

stand that. I was in doubt. They are these vertical——

A. The fins are 56 and the coil itself is 51 because that goes into the tube.

The Court: I see.

A. That goes into the tube back and forth and the fins on the coil make it a finned coil.

The Court: And they are the vertical flanges?

A. Yes. [1389]

Mr. Ramsey: Did I understand that your Honor was suggesting a break at this time?

The Court: Well, we can. This is a good time. Let's take an hour and a half for lunch.

You are now excused till 1:30.

(Whereupon, the jury was excused and the following proceedings were held out of the presence of the jury.)

The Court: Go ahead.

Mr. Cuningham: Your Honor, I am proud to be able to give you the citation I promised you.

The Court: Fine. Give it to me now.

Mr. Cuningham: I will give a couple of copies to our friends on the other side.

The Court: It's in a brief?

Mr. Cuningham: Actually, I don't know. Mr. Cheatham says he signed it.

The Court: Oh, I don't care about that. Is that in connection with the inclusion of description subsequently which is disclosed in the drawings?

Mr. Cheatham: It relates to the question of how

(Testimony of Glenn Muffly.)

claims can be supported by the original disclosure. Now, that was as far as we went to find the original disclosure.

Mr. Cuningham: We ordinarily call it late claiming.

The Court: As I understand it, the original claim here [1390] did not refer to a finned coil, that the description did not refer to a finned coil and the drawings manifest some doubt as to whether it's a finned coil that is claimed?

Mr. Cuningham: Well, your Honor, none of the claims, even the claim in suit, expressly limit the thing to a finned coil, and it would be improper, if they did. However, as Mr. Parker has testified, and I think others have testified, the description, taken with the drawing is certainly adequate to show——

The Court: How about the original description, did it provide for expanders of any kind?

Mr. Cuningham: Expansion surfaces, coils with heat exchange surfaces or expansion, such as by fins or brine tanks. It's inherent in this description.

The Court: Well, your contention, then, would be that if they had a brine tank it would be the same?

Mr. Cuningham: Yes, your Honor. As a matter of fact, I think the testimony, I am sure, of Mr. Bronaugh and I think Mr. Potter, they tried a brine tank and it cost too much money, something like that.

Mr. Byron: Your Honor, the only thing that this specification talks about as originally filed is

(Testimony of Glenn Muffly.)

just this. I will refer, for example, to Column 3 of the patent in suit:

"The freezing compartment or brine tank contains [1391] an expansion coil 22 and a freezing coil 22."

The Court. Is an expansion coil the same as a finned coil or a brine tank?

Mr. Byron: No. No. An expansion coil is only a coil in which liquid expands into a vapor or for absorbing heat like in Anderson.

The Court: All right.

(Discussion off the record.)

The Court: Recess until 1:30.

(Whereupon, at 12:10 o'clock p.m. a recess was taken until 1:30 o'clock p.m.) [1392]

Afternoon Session

(At 1:30 o'clock p.m. the trial herein was resumed, pursuant to recess, and further proceedings herein were had as follows.)

GLENN MUFFLY

a witness produced by the Defendants herein, thereupon resumed the stand and was examined and testified as follows:

Direct Examination
(Continued)

By Mr. Ramsey:

Q. Before lunch, Mr. Muffly, we were referring to Exhibit 118 for Identification. Will you refer to

(Testimony of Glenn Muffly.)

Page 27, elements 1 to 11? A. Page of what?

Q. That is of 118, that is of the Potter patent. Do you have 118, the file wrapper?

A. I have—yes, the file wrapper.

Q. 2,219,789. Please refer to Page 27 thereof.

(Discussion off the record.)

The Court: Can you go to anything else for a minute?

Q. (By Mr. Ramsey): Let us refer to 114-O to -R. Do you have 114-O in front of you, Mr. Muffly? A. 114-O, yes.

Q. Will you please state what that is? [1393]

A. A comparison between Claim 1 of the accused refrigerators and prior Anderson patent.

Q. Was this not prepared by you or under your direction? A. Yes.

Q. Would you first go through the elements as I read them to you to see whether they are all present in Anderson. One, a cabinet? A. Yes.

Q. Two, a cooling compartment? A. Yes.

Q. Three, a freezing compartment?

A. Yes.

Q. Four, thermal insulation around the compartments thermally insulating said compartments from each other and from the outside atmosphere, said air and said cooling compartments having a substantially stable temperature and a relative humidity of 100 per cent at 32 degrees F.? A. Yes.

Q. Air in the freezing compartment having a temperature well below 32 degrees F.?

(Testimony of Glenn Muffly.)

A. Yes.

Q. A cooling refrigerant expander having heat-conducting surfaces within said cooling compartment constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment to maintain said air in said cooling [1394] compartment at substantially stable temperatures?

A. We have "Yes" under Anderson.

Q. These are all related to Anderson?

A. Yes.

Q. A freezing refrigerant expander having heat-conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature well below 32 degrees F. while withdrawing heat from said compartment? A. Yes.

Q. Volatile refrigerant in said expanders?

A. Yes.

Q. A single liquefying unit associated with said expanders and constructed and arranged to contain refrigerant expanded by heat extracted from both said compartments? A. Yes.

Q. A volatile refrigerant circulating through said expanders being the sole heat-extracting medium? A. Yes.

Q. A thermostat responsive to the temperature in one of said compartments controlling the operation of said liquefying unit? A. Yes.

Q. You have answer "Yes" to each of the elements of Claim 1? [1395]

(Testimony of Glenn Muffly.)

A. Yes, each one of Anderson.

Q. Now referring to the Admiral and Amana refrigerators, which are the accused devices, which ones are missing there? A. No. 5.

Q. What is No. 5?

A. Air in said cooling compartment having a substantially stable temperature of about 40 degrees F., and having a humidity whose relative value is at least 100 per cent at 32 degrees F. I have "No" under each, Admiral and Amana.

Q. Any others?

A. No. 7, a cooling refrigerant expandering, having heat-conducting surfaces within said cooling compartment constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment to maintain said air in said cooling compartment at a substantially stable temperature. That I have put "No" under both Admiral and Amana, and the next one, No. 8, a freezing refrigerant expander having heat-conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature well below 32 degrees F. while withdrawing heat from said compartment," again I have "No" under each, Admiral and Amana.

"And No. 10, a single liquefying unit associated with said expanders constructed and arranged to contain [1396] refrigerant expanded by heat extracted by said expanders from both said compart-

(Testimony of Glenn Muffly.)

ments, the volatile refrigerant circulating through said compartments being the sole heat-extracting medium." "No" under both Admiral and Amana.

Q. Will you next refer to 114-P?

A. I have it.

Q. Is that a similar treatment of Claim 2, the patent in suit? A. It is.

Q. Do you find all of the elements—do you or do you not find all of the elements in Claim 2 present in Anderson?

A. They are all present in Anderson.

Q. Now, referring to Admiral and Amana structures, which ones do you find absent, if you find any absent?

A. These are missing. Items 5, 6, 8 and 9.

Q. Those might be meaningless if the jury did not have that list before them.

The Court: Are those the same that you have read just a minute ago?

The Witness: I think I had probably better read them.

Mr. Byron: Answer the question.

The Witness: They are now quite identical here.

Q. (By Mr. Ramsey): Except for air, are they identical?

A. They are substantially the same features, wording of the claim 1. There is a slight difference in wording here. [1397]

Q. Will you next refer to 114-Q? Is this Claim 3 of the patent in suit? A. Claim 3; yes.

Q. How does Claim 3 differ from Claim 1?

(Testimony of Glenn Muffly.)

A. In having the further specification of the thermal insulation around the cooling compartment and so on at the end of the claim.

Q. Is that No. 12? A. Item No. 12; yes.

Q. Would you please read that?

A. A thermostat responsive to the temperature in said cooling compartment and controlling the on-off cycles in said liquefying unit in response to variation of said temperature and the thermal insulation around said cooling compartment offering less resistance to flow of heat thereto from the outside atmosphere than does the thermal insulation of the freezing compartment to insure starting of said liquefying unit by heat flow into said cooling compartment during an off cycle of said liquefying unit before the temperature of said freezing compartment approaches a non-freezing value.

Q. Do you find that present in Anderson?

A. Yes.

Q. Do you find it present in the accused devises, Admiral and Amana? [1398]

A. No, not in either of them.

Q. Would you next refer to Exhibit 114-R?

A. I have it.

Q. How does it differ from Claim 2 of the patent in suit?

A. In the same manner that Claim 3 differs from Claim 1, this addition that I have just read.

Q. Do you find Element 10, as you have identified it, present in the Anderson patent?

A. Yes.

(Testimony of Glenn Muffly.)

Q. Do you find it present in the accused devices, Admiral and Amana?

A. No, not in either.

The Court: What were you referring to, then? What is that exhibit?

The Witness: This is 114-R.

The Court: To what does it refer?

The Witness: It refers to Claim 4 as applied to the Anderson and the accused refrigerators, entitled, "Comparison Between Claim 4 Accused Refrigerators and Prior Anderson Patent."

The Court: As I understand it, Claim 2 is the broadest claim; is that right?

Mr. Anderson: Yes.

The Witness: Yes.

Mr. Ramsey: That is agreed by both sides, if the Court [1399] please.

The Court: Is Claim 2 similar to Claim 4?

The Witness: Yes.

The Court: Claim 1 is similar to Claim 3?

The Witness: Yes, but there is another difference in which 3 and 4 include this final longer wording about thermal insulation.

The Court: 1 and 2 are similar, and 3 and 4 are similar?

The Witness: Yes, with respect to this insulation part.

The Court: The difference between 1 and 2 and 3 and 4 is that it has another limiting factor, the thermal insulation; is that right?

A. Yes.

(Testimony of Glenn Muffly.)

The Court: So if Claim No. 2 is infringed, all of them are infringed?

Mr. Byron: No.

Mr. Ramsey: No.

Mr. Cuningham: I think your Honor is right. That is our theory of it.

Mr. Ramsey: No; the narrower claims might not be infringed, but I think that more or less it stems—generally, from what we had, it is our contention that none of them are valid. Claim 2 is broader. If Claim 2 is anticipated or invalid, all of them are; stating just the opposite. [1406]

The Court: If Claim 2 is invalid, all of them are invalid, but even if Claim 2 is not infringed the more limited claims may be infringed?

Mr. Byron: May I explain that, your Honor?

Mr. Cuningham: Your Honor, I think we are all mixed up.

Mr. Byron: Let me straighten it up.

The Court: All right, Mr. Byron, you try it, and then if Mr. Cuningham is not satisfied with your explanation, we are going to give him an opportunity.

Mr. Byron: Fine. There are four claims in suit. Claim 2 we agreed is the broadest claim. That means the other three claims are more limited in scope. Now, if Claim 2 were infringed, all of the claims would be infringed, and if, let us say, that Claims 1, 3 and 4, which are narrower in scope, have more limitations, may not be infringed at all, even though Claim 2 were infringed, now it is more

(Testimony of Glenn Muffly.)

difficult to infringe a narrower claim with more elements in it, more qualification., and it is more difficult to invalidate a narrower claim, and it is easier to invalidate a broad claim such as. I think that explains it, does it not?

Mr. Cuningham: Yes; I think you misspoke, Mr. Byron.

Mr. Byron: Maybe I did.

Mr. Cuningham: If the narrowest claims are infringed, [1401] then obviously the broadest ones are.

The Court: Yes.

Mr. Cuningham: It is not the reverse. I think that was his only slip.

Mr. Byron: Yes.

Mr. Cuningham: Otherwise, I agree wholeheartedly with what he said.

The Court: Do you also agree that 1 and 2 are almost identical, and 3 and 4 are almost identical?

Mr. Cuningham: Yes, sir; and, further, to compare the two broader with the two narrower ones, 1 is like 3, and 2 is like 4. [1402]

The Court: 2 and 4 are broader.

Mr. Cuningham: 3 and 4 are the narrowest ones and 2 are the broadest. But they have their correlatives. I think you will see what I mean in the reference to air, your Honor, in Claim 2 and in Claim 4. That——

The Court: Well, I thought that 3 and 4 were like 1 and 2 except for the thermal insulation in 3 and 4.

(Testimony of Glenn Muffly.)

Mr. Cuningham: That's correct, sir.

Mr. Byron: Correct.

Mr. Ramsey: Maybe I can take a whirl at it. 3 and 4 have the additional limitation of the relative insulation. Claim 1 and Claim 3 include positively air as an element of the claim.

The Court: All right. Well, that is the reason I asked Mr. Muffly a question because I didn't understand it. Is it more clear to the members of the jury now?

(Whereupon, the jurors nod their assent.)

The Court: I want to commend you on your patience in this case. I know how difficult this is. From time to time we are getting into technical discussions, but this case means much to all the parties concerned and we are on the last week and you have done a good job so far. So keep up the good work and listen carefully to all the testimony.

Q. (By Mr. Ramsey): Now, do you have 418 for identification, Mr. Muffly? [1403]

A. Yes. It's here.

Q. The file wrapper? I wonder if you would refer to page 27 thereof? Are you familiar with the claims in that patent and to which these remarks refer? A. Yes, I have them.

Q. Do they cover substantially the same or similar organization to those referred to in the claims in the patent in suit?

A. This—we are speaking of the Potter 21,9——

(Testimony of Glenn Muffly.)

Q. That is correct; and the claim in the file wrapper that his remarks relate to.

Mr. Cuningham: I'm sorry. I'm confused. Are you talking about claims in the file wrapper and, if so, what claims?

Mr. Ramsey: The ones that precede page 27 in the file wrapper.

Mr. Cuningham: These are not the claims in the issued patent?

Mr. Ramsey: That is right.

Mr. Cuningham: And can you give me the numbers of them?

Mr. Ramsey: Do you have the file wrapper?

Mr. Cuningham: I have a digest of it. I should be able to get them from the digest.

Q. (By Mr. Ramsey): What action is it, Mr. Muffly, and what date?

A. The action on page 27 is the second page of an action— [1404] no—an amendment.

Q. The date of the amendment?

A. October 21st, 1937.

Mr. Cuningham: October 21st, 1937.

The Court: Is this a construction by Potter in connection with some action taken by the examiner?

Mr. Ramsey: That is correct.

Mr. Cuningham: This is in that much later patent——

The Court: Yes. That's right.

Mr. Cuningham: Well, I think I found October——

(Testimony of Glenn Muffly.)

The Court: As I understand it, this is being read for an admission?

Mr. Ramsey: That's correct.

The Court: ——by Potter in connection with this later patent?

Mr. Ramsey: And particularly as to location of this cooling evaporator within.

The Court: All right.

Mr. Ramsey: Within the cooling compartment.

The Court: Go ahead.

Q. (By Mr. Ramsey): Would you please read Lines 1 to 11 in that amendment?

Mr. Cuningham: In the remarks?

The Witness: On page 27?

Mr. Ramsey: That's correct. [1405]

The Witness: Starting at the top of the page?

Mr. Ramsey: Top of the page, yes.

The Witness: "The applicant is not broadly claiming that the use of fins on the boiler but is claiming a novel combination in which the finned boiler forms a part. Regardless of the function which may be performed by the Gibson refrigerator the patent does not disclose the structure used by the applicant. Applicant's structure is materially simpler than that of Gibson who uses the entire inside shell of the refrigerant compartment for transmitting heat to the refrigerant pipes which encircle it. Obviously Gibson does not have a secondary boiler in the food compartment and obviously Baird has nothing corresponding to the sharp freezing compartment."

(Testimony of Glenn Muffly.)

Q. (By Mr. Ramsey): Now, would you read Lines 15 to 17, the same page?

A. "Like Claim 2, Claim 7 recites the fact that the portion of the refrigerant circuit which lies within the food chamber is formed with heat radiating fins."

Q. Now, would you refer to page 41 of the file wrapper, and will you identify it with an amendment date?

Mr. Cuningham: By date, please. I don't have the [1406] page.

Mr. Ramsey: I asked for the date.

The Witness: An amendment received at the patent office April 25th.

Mr. Cuningham: What year?

The Witness: Just a minute, '39—and making various amendments, specifications, and claims, and we come over to the remarks beginning on page 40. You asked me about page 41?

Mr. Ramsey: Commencing at Line 21.

A. Which is a continuation of the remarks.

Q. And will you read that?

A. That starts: "A combination of these"?

Q. That is correct.

A. "A combination of these references does not produce applicants' invention. Gibson discloses a refrigerator in which practically the entire wall area is a refrigerating surface with a large area uniformly exposed. There is practically no direct circulation of air and this condition when food is left in the food compartment for a considerable

(Testimony of Glenn Muffly.)

period of time while the temperature of the food may be maintained within refrigerating limits has the effect of stagnant air. Actual physical tests in applicants' laboratories with a food chamber [1407] of this type filled with food and sealed for a week and with a food chamber provided with a finned coil for cooling filled with identical food and sealed for a week showed that with the finned coil there is obtained a definite circulation of air and that this definite circulation of air on actual tests produces a better food preservation effect."

Q. Going ahead to the Line 21 on Page 42.

A. Yes.

"It was found that food sealed up for a week in a chamber where definite circulation of air was obtained and is obtained through the use of a finned coil showed marked superiority over food that was sealed up for the same length of time in the more stagnant cabinet. Some of the food in the stagnant air cabinet showed a large cover of mold while there was no mold shown in the cabinet built according to applicants' system. Air conditioning means control of temperature, control of humidity, and control of circulation. All these three things are essential in order that the system may come under the term 'air conditioning.' These three elements are necessary [1408] in the right proportion to obtain the maximum values in food preservation when food is preserved at temperatures above 32 degrees F. Food kept in covered containers, in other words, food that is protected against circulating

(Testimony of Glenn Muffly.)

air, grows bacteria at an increased rate because of non-circulating air."

Claim 13——

The Court: How long are you going to read?

Mr. Byron: Five more lines.

The Witness: Six more lines.

The Court: Mr. Ramsey, you shouldn't have had this witness read this. This exhibit is not in evidence. You can't be asking this man to read it. You have to establish that he made an admission before the witness can read. If I permitted this sort of thing to be done I wouldn't have to admit any exhibits. The witness would just read it.

Mr. Ramsey: I was only trying to establish the admission.

The Court: Well, you don't establish the admission by the very document that you are asking to be introduced for the purpose of showing the admission.

Mr. Ramsey: It would be objectionable if I asked him to summarize it. I don't want to——

The Court: I think that's about the only way you are going to be able to do it. But now that he is down to the [1409] last five lines, let him continue. But don't do that any more.

The Witness: Should I read the rest?

The Court: Go ahead.

The Witness: "Claim 13 therefore clearly distinguishes from the patent to Gibson or Gibson taken in connection with Gase as the evaporator for the food chamber in Gibson is not so con-

(Testimony of Glenn Muffly.)

structed that it may occupy a certain predetermined definite confined space within the food compartment causing proper circulation of air which is one of the three elements necessary to provide air conditioning.'

Q. (By Mr. Ramsey): Now, Mr. Muffly, is this patent issued to Thomas Irving Potter?

A. Yes.

Q. And could you explain what it is he is representing to the patent office with regard to the Gibson patent?

A. That the Gibson patent——

Mr. Cuningham: If your Honor please, I think the words speak for themselves.

The Court: I don't understand what they mean.

Mr. Cuningham: Well——

The Court: I don't think the jury does, either, unless they understand a lot more than I do, and I don't believe they do, either. So that's the purpose of an expert on this [1410] particular thing. I think this is what he should have done in the first place. I am going to permit the witness to answer.

Q. (By Mr. Ramsey): Would it be helpful to you to refer to 114-G? A. Which is——

Mr. Ramsey: It's being brought up to you now. You have previously identified it.

A. The question was?

Q. (By Mr. Ramsey): What is the applicant at this point representing to the patent office to secure a patent?

(Testimony of Glenn Muffly.)

A. Representing that the refrigerator shown in Gibson Reissue 21,941, which is the reissue of the reference referred to there, having a cooling coil around the liner of the food compartment instead of having the finned coil within the compartment as shown in Potter Patent 2,219,789 does not produce the same effect and does not cause the circulation of air which is produced by this finned coil, and that foods will spoil in the Gibson refrigerator whereas they keep in Mr. Potter's refrigerator.

Q. What sort of a cooling element is shown in Gibson?

A. The cooling element of the cooling compartment.

Q. Is that a cold wall type?

A. That's a cold wall type. The secondary evaporator is wrapped around the liner of the cooling compartment as it is [1411] in Admiral, shown at the right of the same sheet.

Q. Is that a cold wall type?

A. That is a cold wall type.

Q. Now, what is he saying about the necessity of having this cooling coil within the compartment?

A. He says it's necessary and that obviously Gibson is not within the compartment.

Q. And now, what about the two accused structures following that same line of argument?

A. That same line of argument would say that obviously the coil is not within either the Admiral or the Amana.

Mr. Byron: Cooling——

(Testimony of Glenn Muffly.)

The Witness: Cooling compartment.

Q. (By Mr. Ramsey): Mr. Muffly, one thing that might be helpful to the jury: Why does he say they are different with regard to air circulation?

Mr. Cuningham: I object; calling for the operation of his mind—Potter's mind.

Q. (By Mr. Ramsey): What does he say, then?

The Court: All right. Go ahead.

Q. (By Mr. Ramsey): Can you tell us, Mr. Muffly?

The Court: What does he say, in simple language, Mr. Muffly?

The Witness: Does Mr. Potter say?

The Court: Yes. [1412]

Mr. Ramsey: Yes.

The Witness: He says that the Gibson patent plan of wrapping it around the outside is no good; that he with his finned coil inside of the compartment accomplishes a result which Gibson cannot accomplish.

Q. And what is that?

Mr. Cuningham: Is he quoting now?

Mr. Byron: No.

The Court: I asked him to state in simple language what Mr. Potter contends, the reasons why he says that his is better.

Mr. Cuningham: I object to it as a misquotation of what Mr. Potter says.

The Court: Well, you will have an opportunity of putting Mr. Parker on the stand on cross-examination.

(Testimony of Glenn Muffly.)

Mr. Cuningham: Mr. Parker wouldn't know a thing of what Mr. Potter said.

The Court: He can read that in the file wrapper also.

Q. (By Mr. Ramsey): Considering that "within" and you say it will not work. Now, why does he say it will not work with regard to air circulation or air conditioning, as he calls it?

A. He says that the air in the Gibson refrigerator which is like the Admiral and the Amana will be stagnant; that it will not have the proper circulation; that it will not properly preserve the foods; that they will collect mold [1413] because of having this coil on the outside instead of the inside.

The Court: I think we are going far afield.

Mr. Cuningham: Thank you, your Honor.

The Court: I think that I understood the purpose of this exhibit was to show that the cooling compartment consisted of that portion of the box in which Mr. Muffly previously put his hand. That is inside where you put the food. Is that right?

Mr. Byron: There is another point, your Honor. To establish infringement we have discussed that there must be three identities and one of those identities is substantial identity of result. Now, in taking up these arguments made by Mr. Potter against the Gibson patent, as a reference he says Gibson cannot get these results because the coils are wrapped around the cooling compartment and, therefore, there will not be the circulation of air in the cooling compartment, whereas Mr. Potter,

(Testimony of Glenn Muffly.)

where he has the finned coil within the cooling compartment, he does get a circulation of air and where you do get a circulation of air, he says there will be no mold. If you don't have a circulation of air there will be no mold.

The Court: Well, I don't think that's admissible, Mr. Byron, for this reason: He was never qualified as an expert. Mr. Potter is not an expert and nobody claims he is, [1414] and, therefore, you can't use what he says about an engineering subject as evidence.

The question is, is it true or not, that's the ultimate question? But you can, it is admissible, as I previously pointed out, to show what he envisages a cooling compartment to contain. He didn't define it in his original patent, and, therefore, you can show that at a later time when he uses these words he must have meant the inside and not the outside.

It's admissible for that purpose, but I don't think it's admissible for any other purpose because——

Mr. Byron: That's substantially the same thing. I had it in different words, your Honor, that's all.

Mr. Ramsey: I do offer it and with this additional thing, which might be another facet of the same problem, it is interpretation of the words "within the compartment." Used in the same environment.

The Court: Well, it's admissible for that purpose but it's not admissible whether the air stagnates or doesn't stagnate, because Potter is not an expert.

(Testimony of Glenn Muffly.)

Mr. Ramsey: Is it admitted?

The Court: It's admitted.

(File wrapper, Potter Patent 2,219,789, previously marked for identification, was received in evidence as Defendants' [1415] Exhibit 118.)

Mr. Byron: Is that Exhibit 118?

Mr. Ramsey: Yes.

I wonder if you would have the file wrapper on the reissue patent, which is Exhibit 102, before you, Mr. Muffly?

A. I have 102, the file wrapper of the Reissue Patent 23—— [1416]

Q. Would you refer to Page 62 thereof which is the final amendment dated November 12, 1948. This appears in about the middle of the argument.

The Witness: Paragraph starting, "As further——"

Q. It is the first paragraph, and may I read this to you?

"Furthermore, the elements——"

This is Potter's final argument in the reissue patent in suit to urge these reissue claims.

He says:

"Furthermore, the elements expressed in the reissue claims do not cover all ways by which the results of the Potter, et al., invention could be accomplished. Thus, for example, a two-temperature refrigerator can be built which does not utilize volatile refrigerant expanders, or does not use a single compressor, or does not utilize in its cooling

(Testimony of Glenn Muffly.)

compartment an expander whose surface temperature is always above 32 degrees F. Such refrigerators would not infringe the present claims. We point this out to show further that the elements in the claims are described with definiteness and in terms of their structure."

Now, with that in mind, Mr. Muffly, do you find in the accused devices an expander in the cooling compartment? [1417] A. No.

Q. Do you find an expander whose surface temperature is always above 32 degrees F.?

A. No.

Q. At what temperature do the cooling compartment walls, that is, the inner surfaces of the liner, stand during operation temperaturewise?

A. They will pass the freezing point, ice, somewhat. At one setting of the control they can cyclically defrost, and the coil back outside of it is still colder and vary according to the thermostat setting, may go down to 25 degrees or colder.

Q. Were you in the courtroom when Mr. Parker was on the stand and said that a part, a part that he construed the cooling expander or evaporator in the accused devices were the primary coil of the heat transfer plates? A. I heard that.

Q. What temperature do they stand at during operation?

A. They will go far below zero at times. Their evaporative compressors——

Q. During operation?

(Testimony of Glenn Muffly.)

A. During operation they will go down to 10 below zero, maybe lower.

Q. Then he attempted to connect up those sub-zero coils [1418] as a part of a cooling evaporator, cooling compartment evaporator or cooling coil, with the secondary coils of the accused devices. At what temperature do the cooling coils of the secondary stand during operation?

A. They are the coils surrounding the cooling compartment, and they may be from 20 to 25 degrees.

Q. Thank you. Now, will you refer to Page 65 which is a part of this same amendment, and about the middle of the page. It is a sentence, and I will read it to you:

"The description of the expander in the cooling compartment being constructed and arranged to operate at a surface temperature above 32 degrees F. is definite and when read in the light of the patent specification a person skilled in the art would have no difficulty in arriving at the proper proportions."

With that in mind, do you find in the specification any description whatsoever of the coil 25 except by the number and by calling it 25?

A. No, there is no definition or description.

Q. Do you find in the specification any teaching of proportions? A. No.

Q. Do you find in the specification any mention of temperature or humidity controlled by reason of

(Testimony of Glenn Muffly.)

the structure of [1419] said coil 25 in the patent in suit?

A. In the patent in suit, their wording concerning the temperature and humidity of the air, but nothing——

Q. Do you find——

Mr. Cunningham: Objection, your Honor. Let him finish his answer.

Mr. Ramsey: Are you finished?

The Witness: No—well, that is all right; go ahead.

Mr. Ramsey: I did not intend to interrupt you. I just asked you if your answer was finished.

A. I found—mentioned the air, but I found nothing that refers to the structure necessary or used to accomplish such a result.

Q. You are now referring to the structure of the coil No. 25 of the patent in suit? A. Yes.

Q. You have considered and discussed in some length the coil in the Larkin patent. Do you find there a description teaching proportion and construction? A. Yes.

Q. I wonder if you would step down past this refrigerator which is the accused refrigerator 10-A. Would you point to the control knob used by the householder which is for the moist cold?

A. This knob at the right has a dial which rotates, which [1429] has an arrow pointing "Colder" to turn clockwise; "Warmer" as we turn counterclockwise; "N" for normal in the middle, and if we turn it halfway around it says "Off."

(Testimony of Glenn Muffly.)

Q. Now, "Normal" appears if we consider like the face of a clock at 12:00 o'clock?

A. The "N" standing for normal is at 12:00 o'clock. That is, when it is set at normal the "N" is at the top of the dial.

Q. I ask you to consider, and I do not know the exhibit number, but it is the manual of the Admiral Corporation, the blue one.

Mr. Byron: Plaintiff's Exhibit 4-CC-2.

(Discussion off the record.)

The Court: Is there any reason why he should not use one of those (indicating copies of manual)?

Mr. Ramsey: Would you agree that is one of them, Mr. Cunningham?

Mr. Cunningham: That is one of those.

Mr. Ramsey: You have no objection?

Mr. Cuningham: No; go ahead.

The Court: Go ahead.

Q. (By Mr. Ramsey): Do you understand the design and operation of the Admiral refrigerator?

A. Yes.

Q. On which you have just pointed out to the jury the location [1421] of the control knobs?

A. Yes.

Q. I ask you to turn in that manual to Page 52 and the paragraph marked F. Do you find that?

A. Yes.

Q. May I read to you:

"The Moist Cold compartment in Model 1690 and 1390 Dual-Temp refrigerators will not ice up when

(Testimony of Glenn Muffly.)

used at sea level if the temperature controls are correctly calibrated except possibly when both controls are turned practically to the maximum cold positions.

"The Moist Cold compartment in Model 1191 Dual-Temp refrigerators is designed so that ice forms on the walls when the compressor is running and thaws when the compressor is not running with the Moist Cold Temperature Control set at 'Normal.' In other words, it is designed for a 'Freeze and Thaw' cycle. Consequently, icing in this model is normal unless it does not thaw during the off cycle. However, too much ice (ice does not thaw and continues to build up) is an abnormal condition and should be checked as outlined in the following paragraphs. [1422]

"Due to minor differences in production parts in Models 1090 and 1390, you may receive an occasional complaint of ice formation with the Moist Cold control at 'Normal,' and a complaint of ice build-up in Model 1191. In such cases, you can check the control calibration and replace the control if necessary, but most of these complaints can be handled by instructing the consumer to turn the Moist Cold temperature control towards the warmer side enough to prevent icing. Explain to the consumer that icing condition is proof that the refrigeration mechanism is in excellent order since it is capable of maintaining lower wall temperatures than necessary."

(Testimony of Glenn Muffly.)

Would you explain to the jury what temperatures are attained in the surface of the liner when that is moved from "Normal" clockwise towards the colder side?

A. That would bring the liner temperature down to this point where the icing would last over until the next cycle; not defrosting each cycle.

Q. What would happen if that were turned to, say, about 3:00 o'clock?

A. That would be an intermediate point, probably more icing; not necessarily icing over to last through the cycle. [1423]

Q. When ice forms on the liner, does this, or does the accused device or devices—does that indicate that a temperature below 32 degrees F. is attained? A. Yes, definitely.

Q. Would that be the condition that exists in which the applicants state is outside of their patent and would not be an infringement? A. Yes.

Mr. Ramsey: You may cross-examine.

Cross-Examination

By Mr. Cuningham:

Q. What, in your opinion and with your background of over a hundred thousand patents, is the closest prior art patent to the patent in this case?

A. There are so many that that is very difficult to select one. Anderson——

Q. You had no difficulty with——

Mr. Ramsey: Wait; let him finish his answer.

(Testimony of Glenn Muffly.)

Mr. Cunningham: I would like an answer to the question.

The Witness: All right; we have Anderson.

Q. (By Mr. Cunningham): Is that the closest prior art patent?

A. We are talking about those that are here.

Q. No, of all you know about. The number of that patent is 1,439,051. [1424]

A. That is the one we selected to use here.

Q. Thank you. Did you, Mr. Muffly, write an article in a publication entitled "Ice and Refrigeration" of July, 1941, and I show you the only photostatic copy of that that I have.

The Court: Has it been identified?

Mr. Cunningham: No, it is a publication—I plead guilty; I found it in my papers

Mr. Byron: We object to that now, your Honor.

Mr. Cunningham: I did not intend to offer it in evidence. I would like to get his agreement to a statement in it, however, that he wrote, acknowledgement that he wrote it. I would like to have it marked, and if I had realized that I had it——

The Court: I am going to let you do it this time. Mark it.

Mr. Cunningham, our rules provide no surprises, and you are supposed to have this marked before counsel for the other side. I will permit this one if you say you have been surprised by anything Mr. Muffly has said.

(Photostatic copy of document referred to marked Plaintiff's Exhibit 23 for Identification.)

(Testimony of Glenn Muffly.)

The Court: Did you write that article, Mr. Muffly?

The Witness: It has my name at the top. I am just [1425] looking to see which article it is.

Mr. Cuningham: It has your picture on it.

A. Yes, yes, obviously my article.

Mr. Cuningham: I offer it in evidence, your Honor.

The Court: You said you did not want to offer it; you just wanted to find out whether he agreed or did not.

Mr. Cuningham: I offered it because I thought —I really—I just wanted to get one statement in. I will withdraw the offer, your Honor. I think it does encumber the record.

The Court: Give it back to him and ask him if he agrees with the statement.

Q. On Page 42 under the subdivision of this article which bears the title, "1930-1935"——

The Witness: The date of the publication, please?

Q. I beg your pardon?

A. The date of this publication, what is this?

Mr. Cuningham: It is "Ice and Refrigeration," July, 1941, Mr. Muffly.

A. July, 1941.

Q. Perhaps I should state this about it. It is entitled, and I quote, "Twenty-Five Years of Household Electric Refrigerator Development," by Glenn Muffly, Consulting Engineer, Springfield, Ohio. It starts on Page 38 of that magazine and

(Testimony of Glenn Muffly.)

apparently runs through to Page 44, and on [1426] Page 42 I read the following, and that is under the subdivision 1930-1935. This is a five-year subdivision period on a 25-year coverage of the history of the art. A. Yes.

Q. "Some manufactureres went so far as to supply a separately insulated space in which frozen foods might be kept in larger packages than would go into the ice tray space. This called for two evaporators, one at a low temperature with the frozen food compartment, and one at a non-frosting temperature or operated on a defrosted cycle for the main food space which was thereby held at a higher humidity. This is a trend of which we will hear a lot more."

Do you recall writing those words?

A. I don't recall writing them, but it sounds like something I might have said.

Q. Well, you tell us, subject to any correction that I read, the right words in your recollection.

A. I advocated that sort of design ten years earlier than this.

Mr. Cuningham: Now, if your Honor please, just one more quotation on the same page, and this is under the heading "1941 and the Future." [1427]

Mr. Cuningham: Now, if your Honor please, just one more quotation on the same page, and this is under the heading: "1941 And The Future," and I quote:

"Probably the biggest trend this year is in the direction of two-zone refrigerators which provide a

(Testimony of Glenn Muffly.)

place for storing frozen foods. All manufacturers talk as if they had this and some really do have it. The trend is in the direction of what amounts to a small very low temperature refrigerator located inside of a larger refrigerator in which the cooling surface is held above freezing so as to prevent the accumulation of frost and the dehydration of cabinet air. In a few years a refrigerator in which frost is visible when you open its outer door will look like an automobile with a starting crank hanging on the front."

Your witness. That concludes my cross-examination.

The Court: The jury is instructed to disregard the remarks because it wasn't an impeaching statement.

Mr. Ramsey: Defendant rests.

Mr. Cuningham: If your Honor please, we had expected to have two other witnesses, as I previously announced. I don't know that we are prepared to go ahead with Mr. Parker at this stage. We counted on this evening for it. [1428]

The Court: How many witnesses do you propose to call in rebuttal now?

Mr. Cunningham: Just Mr. Parker, your Honor.

The Court: Just Mr. Parker.

Mr. Cuningham: By the way, he got in at 4:00 o'clock this morning.

The Court: We are not going to rush Mr. Parker. We are going to give you all the opportunities to prepare your case.

(Testimony of Glenn Muffly.)

How long will Mr. Parker take?

Mr. Cheatham: I believe somewhere between a half hour and three-quarters of an hour.

The Court: All right.

Now, I will tell you what I am going to do. I am going to recess this case until tomorrow morning to give you an opportunity of putting Mr. Parker on, with the understanding, however, that argument will follow Mr. Parker's testimony.

Mr. Cuningham: All right.

The Court: Now, according to our original plans, neither side can take more than two hours in argument. In other words, I am not urging anyone to speak for two hours, but that is the maximum time than can be taken.

Mr. Cuningham, if you are going to do the arguing on behalf of the plaintiff you can split your time up any [1429] way you want, except that you may not take or reserve more than half your time for rebuttal.

In other words, if you speak less than an hour on your opening you will only get an hour on your closing, and both arguments need not be made by you, but Mr. Cheatham can make any argument at any time he wants. You can give him any time you want.

As far as the defendants are concerned, you can split up amongst the four of you any time you want, as long as it doesn't take more than two hours.

Ladies and gentlemen of the jury, I think it's

(Testimony of Glenn Muffly.)

best that we give Mr. Parker an opportunity to go over the evidence. I think we will take a lot less time. I am not going to instruct you as to the law until Thursday morning at about 9:30. I don't want to instruct you tomorrow at 4:00 o'clock or 5:00 o'clock in the afternoon, which might take us up to about 6:00 o'clock before you go out. This way you are going to have plenty of opportunity to discuss the case and come to a conclusion, I hope, by a reasonable hour.

Now, on that day I would like to have you here about 9:30 and we will finish the instructions by about 11:00 o'clock.

(Discussion held off the record.)

(Witness excused.) [1430]

The Court: All right. I need not tell you this, but please keep an open mind. I assume that you are all going to do that and you are excused until 10:00 o'clock tomorrow morning.

(Whereupon the jury was excused.)

(Whereupon proceedings were had but not reported.)

(Whereupon, at 2:45 o'clock p.m., an adjournment was taken until 10:00 o'clock a.m., Wednesday, November 30, 1955.) [1431]

Wednesday, November 30, 1955, 10:00 A.M.

proceedings herein were resumed pursuant to adjournment, as follows:

The Court: Mr. Parker, I understand you are going to testify.

NORMAN S. PARKER

was thereupon recalled in rebuttal as a witness in behalf of plaintiff, and, having been previously sworn, testified as follows:

Direct Examination

By Mr. Cheatham:

Q. Mr. Parker, have you familiarized yourself with Defendants' Exhibits 114-A and 114-B, which are these colored charts entitled "Claim 2 Does Not Read on Admiral" and "Claim 4 Does Not Read on Admiral"? A. Yes.

Mr. Cheatham: I would like to pass these to you.

(Whereupon the Crier hands two charts to the witness.)

Q. (By Mr. Cheatham): I would like to have you comment with respect to Item 5 on 114-A and give us your opinion as to the correctness of that conclusion as shown on that chart.

A. In this chart I might say for clarification of what I am going to say that at the right-hand of the chart or exhibit [1432] there is a reproduction

(Testimony of Norman S. Parker.)

of the drawings of the patent in suit. At the left side is a somewhat diagrammatic drawing showing —labeled "Admiral." In between the Claim 2 is parsed or broken into components and along the margin of this quotation from the claim is a series of comments.

For the first four items no comment is indicated. These comments are between the ones—the ones I am alluding to are between the diagram of the Admiral device and the quotations from the claim. The Item 5 about which you asked reads: "A cooling refrigerant expander having heat conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees F. and is maintained at a humidity whose relative value is at least 100 per cent at 32 degrees F."

That part of the claim which I have quoted is in this parsing in the middle of the exhibit, broken up into four paragraphs or four separated spaced bits. The top one——

The Court: Mr. Parker, I don't want to interrupt you, but I think it would be much more effective if you would have that exhibit brought out to the jury. They have a blown-up copy. [1433]

Mr. Cheatham: Thank you, your Honor.

(Testimony of Norman S. Parker.)

(Whereupon the blown-up chart was placed on the easel in view of the jury.)

Mr. Cheatham: 114-A.

The Witness: The part 5 as I quoted is about in the middle of the chart. At the first subdivision which was talked about, I believe, by Mr. Muffly, "A cooling refrigerant expander," no comment.

Then in the second subdivision, "Heat conducting surfaces within said cooling compartment" and opposite that is the word "No." Then there is a bracket of two parts, the first of which, "constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 degrees Fahrenheit while withdrawing heat from said compartment." Opposite that is a statement "No. Is a function of thermostat." Then below is a statement which is part of the bracket and opposite this there is no comment, "whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees Fahrenheit and is maintained at a humidity whose relative value is at least 100 per cent at 32 degrees F."

Now, where Mr. Muffly and I completely differ in our interpretation of the language of the claim is that Mr. Muffly feels that this language has to—that this language of the claim, if I understand Mr. Muffly correctly, [1434] can only be satisfied if the duct or the part of the expander in which the refrigerant evaporates is also in the storage space. I

(Testimony of Norman S. Parker.)

do not so read the claim and to me the language does not require it. What the language says is that "a cooling refrigerant expander has heat conducting surfaces within the cooling compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment."

To me, that notation of the claim is completely satisfied by the Admiral structure because the liner in the compartment has a heat conducting surface and that heat conducting surface is subjected to the heat of the material to be refrigerated. If any food is put in the cooling compartment it is surrounded by this heat conducting surface, and the heat conducting surface which is in the cooling compartment accepts the heat or takes the heat from the material in the storage part of the compartment and that heat is removed under circumstances where the conducting surface, namely, the liner of the compartment—the liner in the compartment itself is not frosting or is not supposed to frost.

And it's perfectly clear that the intention of the Admiral device, or the operation of the Admiral device, its expected operation is refrigeration without normal deposits [1435] of frost or abstraction of moisture from the food in the form of frost on the liner. That's clear from the statements in their manuals.

(Testimony of Norman S. Parker.)

In other words, to me the Item 5 reads precisely on the Admiral structure and is satisfied by it.

Q. Do you have any comment with respect to Item 6 of that Chart 114-A?

A. Of course, Mr. Muffly and I do not agree in the interpretation of the statements, "A freezing refrigerant expander having heat conducting surfaces within said freezing compartment." I say that the Admiral structure and, for example, the Admiral freezing compartment as exemplified in Exhibit 117-A does have, as this exhibit says, heat conducting surfaces within the freezing compartment, and these are constructed and the heat conducting surfaces and the expander in the environment in which they are used are constructed and arranged to maintain a heat conducting surface at a temperature well below 32 degrees Fahrenheit while withdrawing heat from said compartment. That is the purpose of this device and that is the way it works.

To me, limitation No. 6 reads precisely on the Admiral refrigerator.

Q. Do you have any comment with respect to Item 8?

A. Well, in Item 8, again, I think the difference between Mr. Muffly and myself is perfectly clear. Mr. Muffly, I don't [1436] think, would deny it.

Mr. Byron: Now, wait a minute. I don't believe that is quite proper.

(Testimony of Norman S. Parker.)

The Court: Well, it's just semantics, that's all. Just change your language.

The Witness: Yes, I would say that I think that we would all agree—put it that way—that the motor compressor unit in the bottom of the Admiral refrigerator working with the condenser which condenses the hot gas delivered from the compressor is the means and the only means for actually taking heat from the two compartments out of the refrigerator and releasing it through the room and in air or whatnot.

In other words, the only way shown in Admiral whereby the heat from the food stored in the two cabinets can be taken out of this refrigerator and can be gotten rid of—the only way to do it is to use the circulating refrigerant which circulates through the single compressor condenser unit at the bottom of the Admiral cabinet. As a matter of fact, it is stated very much along the lines described in one of the Admiral manuals.

Q. All right.

A. So, to me, the limitation 8 reads perfectly precisely on Admiral and you will have to take, of course, the limitation together, "a single liquefying unit associated with said [1437] expander." Now, what does that single liquefying unit do? It is constructed and arranged to condense refrigerant expanded by heat extracted from both said compartments, and that is precisely what the condenser compressor unit in the bottom of Admiral cabinet does.

(Testimony of Norman S. Parker.)

Of course, Admiral has added something else. They have added an additional secondary system. The obvious function of that system, if I understand it correctly, is to localize the heat from the moist cold compartment so that the primary transfer plate can pick it up and take it down to the compressor condenser unit and get rid of it. And that is not done by the secondary system but by the primary system. All that the secondary system does is to localize, you might say, the heat abstracted from the interior of the moist cold compartment and put it in a place where the primary expander does the work to take it away.

Q. Do you have any comments with respect to Item 9 of 114-A? Sorry——

A. Well, the item is "A volatile refrigerant circulating through said expanders being the sole heat extracting medium." To me, that is a clear description of the Admiral box since the only volatile refrigerant which abstracts the heat from the two expanders to get rid of it is the refrigerant in the primary system. I can see why, if you were going to choose language, you can say there is in addition another [1438] volatile refrigerant that circulates in the secondary system. That I admit. But I do not feel that that is the volatile refrigerant called for by this limitation. This limitation is perfectly clear. And No. 9 has to be read with No. 8.

It's a perfectly proper description of the use of a single refrigerant passing through a single com-

(Testimony of Norman S. Parker.)

pressor condenser unit which is the means for removing heat from both storage compartments. And that is true of the Admiral structure. So, to me, the limitations 8 and 9 read precisely on the Admiral structure.

Q. I refer you to Plaintiff's Exhibit 4-CC-2, and ask you if there is any statement in that exhibit which substantiates what you have just been saying, particularly referring to page 2 of that exhibit.

If your Honor please, those exhibits are attached to the interrogatories and are difficult to open up in the Court's copy. May I pass my copy to the witness?

The Court: That's all right. Go ahead.

(Whereupon the Crier handed Mr. Cheatham's copy to the witness.) [1439]

A. Exhibit 4-CC-2, Page 2, first column, has a statement which I had better use in the language of the exhibit itself, and I will quote:

"The Admiral Dual-Temp, as its name implies, is a two-temperature, two-compartment refrigerator. It has a separate independently controlled freezing locker for storing frozen foods and a separate independent controlled moist cold compartment for storing foods at ideal conditions of temperature and humidity (above freezing). These two compartments are entirely insulated from each other and in effect constitute two refrigerators in a cabinet and operate by a single motor compressor unit."

(Testimony of Norman S. Parker.)

Q. I refer you to Exhibit 4-CC-6, another Admiral refrigerator service manual, and ask you if you find anything on Page 46 thereof similar to that; however, of the same import?

A. This exhibit is one which I had in mind when I was thinking about Limitation No. 5 and the moist cold and the freedom from icing. At the bottom of Column 1 of Page 46 of this exhibit and running through the top of Column 2 is a passage which clarifies what I mean. I will quote:

"At the normal setting of moist cold or secondary cold control, cut-in and cut-out temperatures about four inches back from the [1440] front edge on the side walls of the moist cold liner level with the half-shelf should be somewhere between 42 degrees Fahrenheit and 34 degrees Fahrenheit. The observable difference between cut-in and cut-out temperatures is not very great due to the impossibility of obtaining ideal thermal contact. At the bottom-shelf level the wall temperatures may normally be a few degrees colder."

I break my quotation. Here is what to me is a important statement in relation to what I testified about Limitation 5 of Exhibit 114-A:

"However, it is not intended that wall temperatures will ever be carried at the freezing point of 32 degrees. The customer should be instructed to turn the control to warmer if icing occurs."

Then skipping a few lines and quoting:

"The moist cold compartment air temperature

(Testimony of Norman S. Parker.)

taken with a thermometer placed in a glass of water near the center of the compartment will, at normal, be between 37 degrees and 40 degrees F. after the door has been closed overnight."

Q. I would like to have Chart 114-B placed on the easel.

(Exhibit referred to produced.)

Q. Will you repeat anything of a similar comment with respect [1441] to the item of difference between 114-A and 114-B?

A. In 114-A opposite Limitation 5——

Q. Mr. Parker, will you explain what difference there is first, and what is your comment as to the difference?

A. Well, the difference basically between 114-A and 114-B is that 114-B is a parsing or application of Claim 4 of the Bronaugh and Potter patent, and the body of the claim is basically the same. There is an additional limitation to what we have been calling or I have been calling the differential insulation about the cold compartment—the freezing compartment and the moist cold compartment. I notice, however, there is a difference in the wording which I am not sure—the basis of which I do not understand in, opposite Paragraph or Limitation 5. In the Exhibit 114-A were the words "No —is the function of the thermostat." In 114-B although the language of that part of the claim is the same, the words "a valve" have been added under the

(Testimony of Norman S. Parker.)

function of a thermostat. You asked me for a difference, and I am not clear in my mind as to why that was made.

Now, a further addition is, or a change is that Limitation 10 specifies a thermostat which is responsive to the temperature in the cooling compartment and controlling the on and off cycles of said liquefying unit in response to said temperature and the further limitation which is not given a number and which is merely marked "Vague" on the [1442] exhibit,

> "A thermal insulation around said cooling compartment having less response to flow of heat thereto from the outside atmosphere than does the thermal insulation of the freezing compartment to insure starting of said liquefying unit by heat flow into said cooling compartment during an off cycle of said liquefying unit before that temperature in said freezing compartment approaches a non-freezing value."

Now, as to the Limitation 10 that the thermostat which in indicated at two points, if I correctly read this structure, the thermostat, this limitation said, is responsive to temperature in the cooling compartment and controlling the on and off cycles of said liquefying unit in response to said temperature.

In other words, the structure, to satisfy that limitation of the claim, must have a thermostat—it need

(Testimony of Norman S. Parker.)

not be in a specific compartment, but it must respond at least to some degree to the temperature of the cooling compartment.

Now, the thermostat which is associated primarily with the freezing compartment is shown by a black line at the upper right-hand part of the Admiral structure, and this location of the heat-responsive member indicated by the black [1443] line is in the Admiral device, if I correctly understand it, located at the bottom of the freezing cabinet where the insulation between the freezing cabinet and the cooling cabinet is at its thinnest, and in one of the service manuals is a statement that the insulation between the freezing cabinet and the cooling cabinet had been reduced to provide a heat path between the two. I had better use the language of the exhibit rather than my own because then we will know precisely what the Admiral manual said. This, again, is 5-CC-2 at Page 1 in the first, about a little above the middle of the second column of Page 1, and I am quoting:

"Also, less insulation is used between the locker of a moist cold compartment, and, consequently, the top of the moist cold compartment is cooled somewhat by the bottom of the locker."

So there is a heat path between the two. This heat path must inevitably result in the fact that an increase in temperature in the moist cold compartment will have some effect through this thin insulation on the response of the thermostatic member

(Testimony of Norman S. Parker.)

which controls the thermostat which, in turn, controls the compressor condenser unit.

Q. Then you are disagreeing with the statement of "No" appearing opposite Item 10 with respect to the Admiral [1444] refrigerator on Exhibit 114-B?

A. Yes, that is correct, and I would also make an alteration if it were my exhibit, if I were responsible for it. Opposite the words "a thermostat itself" is the word "Yes" and from "Yes" extends a black line to a thermostat which has, again, a thick black line running down to the moist cold compartment. I would draw the line up to the thermostat at the upper right-hand corner rather than the one down in at the left of the Admiral diagram.

Q. Where is that line with respect to the thermostat drawn in Exhibit 114-A?

A. In Exhibit 114-A the line extends to the right-hand thermostat; whereas, in 114-B it extends to the left-hand thermostat of the Admiral diagram.

Q. Mr. Parker, while you are still on your feet I would like to have the exhibit removed, and I direct your attention to the Admiral refrigerator which is on the floor as Exhibit 10-A. Mr. Parker, you testified concerning your opinion as to the difference in insulation between the cooling compartment and the refrigerating compartment in the Admiral Exhibit 10-A, and I ask you if you have had any occasion to strengthen your opinion concerning that differential insulation since that date of your testimony?

(Testimony of Norman S. Parker.)

A. Yes, I read Mr. Bohman's testimony the other day that the insulation was generally uniform of a thickness, if my [1445] memory is correct, of around three inches throughout the cabinet, except that in the bottom of the moist cold compartment where the motor compressor is positioned and at the bottom of the condenser there is a thinning of the insulation of the moist cold compartment. This thinning, of course, is located at or near the zone where the room air is circulating up, through and about this condenser and is taking heat out of the hot gas; in other words, hot gas is being delivered along a hot gas pipe from the motor compressor unit to the condenser. The air flowing around this hot gas is taking the heat out so this is the zone where there is a substantial upward movement of warm air, and when I heard that Mr.—or saw that there was testimony to the effect that it was at this point that the insulation was thinned I became convinced that the result of that thinning would be at least some reduction, and probably a substantial reduction, in the effective insulation of the moist cold compartment. I was also interested in seeing the removal of this pan at which I am pointing which is, was on the back of the refrigerator. I saw this removed, and in the space between the pan and the back of the refrigerator were the tubing to which I am pointing exists, is, there were two thick batts of the insulating material under apparently some compression because when the outside cover

(Testimony of Norman S. Parker.)

was removed they swelled out. The outside cover itself [1446] which I am holding in my hand is somewhere in the neighborhood of two inches thick and it is filled with another insulating batt. Now, these additional insulating means are outside of the general insulation and in addition to the general insulation of the box.

Q. What portion of the box?

A. Of the freezing compartment of the box, so, if I understand the testimony correctly, there is a substantial, uniform thickness of insulation around the freezing compartment and the moist cold compartment, and then this additional insulation is added at the back of the freezing compartment, and it is significant to me that it is added precisely where the warm air flowing upwardly through and past the condenser flows back of the freezing compartment, so what you have here is a movement of warm air up the back of the compartment with some reduction in insulation of the moist cold compartment and a very definite increase in thickness of the insulation of the freezing compartment precisely along the path of movement, along this hot air or heated air. To me that indicates that there must be a very substantial differentiation in the insulating effect or the insulation of the two compartments.

Q. Then, in your opinion, does the Admiral refrigerator come within the terms of Claims 3 and 4 of the patent in suit?

(Testimony of Norman S. Parker.)

A. It is my opinion that it does. [1147]

Q. Mr. Parker, I refer you now to Defendant's Exhibits 114-O, -P and -Q and -R. May I hand the witness my copies? Start with Exhibit 114-O and state briefly what this exhibit purports to be. [1448]

Q. (By Mr. Cheatham): I will ask you to start with Exhibit 114-O and state briefly what this exhibit purports to be.

A. You don't have large reproduction of these, I judge?

Mr. Cheatham: Are there large reproductions?

Mr. Cuningham: May I get them, your Honor?

The Court: Mr. Hart will get them.

Mr. Ramsey: There are no large ones of these.

Q. (By Mr. Cheatham): These are the printed small exhibits. There are no large ones mounted on cardboard.

A. Well, these are four exhibits: 114-O, -P, -Q and -R, about which Mr. Muffly testified.

Taking 114-O first, it is headed "Comparison between Claim 1 accused refrigerators and prior Anderson patent." At the left of the exhibit is the breakdown of the claims just about like what you saw in Exhibits 114 A and -B which I just testified from. At the right-hand of the exhibit are three columns. The first is headed "Admiral"; the second is "Amana"; and the third is "Anderson," in parentheses "Before Potter." Taking the numbered limitations of the claim one by one, Mr. Muffly, I believe, has put a "Yes" or "No" answer in each

(Testimony of Norman S. Parker.)

of those columns. I am going to consider only the Admiral column to the left and the Anderson column to the right because I have not paid much attention to the Amana.

Q. Mr. Parker, do you have any comments with respect to [1149] any of the "Yes" and "No" answers which Mr. Muffly has given on this Exhibit 114-O?

A. Well, there are some of them with which I do not agree, and I would comment. Perhaps it would save time if I mention only the limitations to to which I do not agree.

Limitation 5 I will read for completeness. "Air in said"—this is Claim 1——

"Air in said cooling compartment having a substantially stable temperature of about 40 degrees F. and having a humidity whose relative value is at least 100 per cent at 32 degrees F."

Of course, this is just another way of saying that you have very moist air in the cabinet. In the Admiral column Mr. Muffly has said, "No" and I would say yes.

In the Anderson column Mr. Muffly has said "Yes," and I would say no. Then coming to—I might say that there are statements—a number of statements in the Admiral circulars to the effect that a very moist climate or moist air is maintained in the so-called moist cold compartment. And, of course, the moist cold compartment is marked as a moist cold compartment on the Admiral box, about which I just testified.

(Testimony of Norman S. Parker.)

So when Mr. Muffly says that there is not a moist cold compartment in Admiral and there is in Anderson, I differ with him on both points. [1450]

Then moving to Limitation 7.

"A cooling refrigerant expander having heat conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 degrees Fahrenheit while withdrawing heat from said compartment to maintain said air in said cooling compartment at said substantially stable temperature."

Mr. Muffly says "No" as to Admiral, and I would say yes. He says "Yes" as to Anderson and I would say no.

In Paragraph 8 or Limitation 8.

A freezing refrigerant expander having heat conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature well below 32 degrees Fahrenheit while withdrawing heat from said compatrment."

In the Admiral column Mr. Muffly says "No," and I would say yes.

Again, at No. 10.

"The single liquefying unit"—I have already stated my opinion. I had better read it.

"A single liquefying unit associated with said expanders and constructed and arranged [1451] to condense refrigerant expanded by heat extracted

(Testimony of Norman S. Parker.)

from said expanders from both said compartments with volatile refrigerant circulating through said expanders being the sole heat extracting medium."

I have testified already in connection with Exhibit 114-A as to why I feel that that reads precisely on the Admiral box. So where Mr. Muffly said "No," I would say yes. As to Anderson, he says "Yes," and I would say no.

In other words, there are several definite points of difference—difference of opinion between Mr. Muffly and myself as to this 114-O.

Q. Mr. Parker, are you reading off No. 10 on 114-O?

A. Yes. No. 10 is the single liquefying unit limitation which I quoted.

Q. Did I understand you to say that you would say "Yes" as to Admiral?

A. I would say Yes as to Admiral.

Q. And did I understand you to say that you would say "Yes as to Anderson, and I ask you to refer to the Anderson patent so there will be no mistake?

A. Well, Anderson has a single liquefying unit which is associated with two expanders.

Q. Now Mr. Parker, passing to Exhibit 114-P, do you find the same points of disagreement there with Mr. Muffly's "Yeses" [1452] and "Noes"?

A. Yes. The fifth limitation is—wait a minute. In the numbering—the numbering is not, I don't think, identical to the different limitations in the two exhibits. I had best be a little careful.

(Testimony of Norman S. Parker.)

I notice in -P, that Limination 5 relates to "the cooling refrigerant expander having heat conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees F. and maintained at a humidity whose relative value is at least 100 per cent at 32 degrees F."

As to that, Mr. Muffly said "No" to Admiral. I would say Yes. He says "Yes" to Anderson, and I would say No.

In Limitation No. 6 in 114-P, to the effect:

"That the freezing refrigerant expander has heat conducting surfaces within the freezing compartment and constructed and arranged to maintain its heat conducting surfaces at a temperature well below 32 degrees F. while withdrawing heat from said compartment whereby air in said freezing compartment is cooled thereby to a temperature [1453] well below 32 degrees Fahrenheit."

Mr. Muffly puts "No" in the Admiral column, whereas I would put Yes. Of course, I would agree with the "Yes" in the Anderson column.

In No. 8 in -P is the limitation numbered as 10 in -O; that is:

"A single liquefying unit associated with said expanders and constructed and arranged to condense refrigerant expanded by heat extracted from both compartments."

(Testimony of Norman S. Parker.)

A single liquefying unit which condenses refrigerant expanded by heat extracted from both compartments, as to that Mr. Muffly says "No" to Admiral. I would say Yes. As to Anderson I would agree with Mr. Muffly on the "Yes." There again, the volatile refrigerant circulating through said expanders being the sole heat extracting medium, I read 9 with 8, of course, and I say that that language to me means that the single liquefying unit which is constructed and arranged to condense refrigerant expanded by heat extracted from both compartments has a volatile refrigerant circulating through the expanders which is the sole heat extracting medium for extracting heat from the two compartments.

In other words, that is what that language means to me. Therefore, I think it says precisely that. Therefore, where Mr. Muffly says "No" in the Admiral column, I say Yes. [1454]

Q. Now, referring to Exhibit 114-Q, would you make the same analysis with respect only to Item 12 at the bottom of the chart, and limit your answer to whether you would say No or Yes?

A. As to Item 12 in 114-Q, a comparison of Claim 3 with the accused refrigerators, I would say in the Admiral column "Yes" where Mr. Muffly has said "No."

Q. Would you make the same statement with respect to Item 10 in Exhibit 114-R?

A. Yes. I would say Yes instead of "No" in the Admiral column.

(Testimony of Norman S. Parker.)

Q. Mr. Parker, have you ever observed any refrigerator of the Potter Refrigerator Corporation in operation?

A. Yes. I have seen two of them in operation.

Q. Have you ever observed the condition of frosting in the cooling compartment in those two operating Potter refrigerators? A. Yes.

Q. Would you state whether or not you have seen any signs of frosting in the cooling compartment coil?

A. In one Potter box which I saw——

Mr Byron: Excuse me a minute. I would like to have it made clear whether or not he is talking about the structure disclosed in the patent in suit or the actual structure of the Potter refrigerator, and it's improper rebuttal also.

The Court: I think also you are getting pretty close [1455] to the line. As Mr. Parker has been testifying particularly in connection with his comments on the effects and purpose of certain elements in the patent and in the accused structures, I was wondering whether he wasn't making engineering judgments rather than patent judgments. And he has been qualified not as an engineering expert—he has told us time and again that he is not an engineering expert, and he is just testifying as a patent expert. I didn't say anything before, but I think you are getting kind of far afield now asking him his judgment as an engineering expert.

Q. (By Mr. Cheatham): Mr. Parker, in your

(Testimony of Norman S. Parker.)

opinion do you have to be an engineer to see whether a coil frosts or not? A. No.

Q. Mr. Parker, have you seen the coil in the operating Potter refrigerator about which you talked——

Mr. Byron: We renew the objection.

The Court: Well, that's all right.

Q. (By Mr. Cheatham): ——and the condition of frost with respect thereto?

A. In the two Potter boxes which I had opportunity to see in operation there was slight frosting at the point of entry of the finned—of the tube of the finned coil and there was some frosting on one and I believe two of the fins, which would be at the left hand of the Potter box, the box in exhibit. There was a slight frost—a little frost, yes. [1456]

Q. What does the Potter patent say with respect to the amount of frosting?

Mr. Byron: Now, wait. I would like to have that question again. I think I am going to object.

The Court: "What does the Potter patent say with reference to frosting?"

Mr. Byron: Well, the patent speaks for itself.

The Court: Go ahead. Go ahead, Mr. Parker.

The Witness: There is an illusion to slight frosting in the Potter patent. I haven't got the patent before me and I would hesitate to improvise. Could I have a copy of it?

(Whereupon the Crier handed the copy of the patent to the witness.)

(Testimony of Norman S. Parker.)

The Witness: In Column 6 of the Bronaugh and Potter patent, starting in Line 3, there is this sentence:

"There may, of course, occur a slight amount of frosting where the cooling coil 25 enters the compartment 14."

Mr. Cheatham: The witness is yours.

Cross-Examination

By Mr. Byron:

Q. Mr. Parker, let us refer for the moment to the patent in suit, and in Figure 1 in the cooling compartment you will observe a milk bottle 30. What is that for? [1457]

A. I didn't hear the last word.

Q. What is that for?

A. It's to collect condensed moisture from the cooling coil 25.

Q. Speak louder, please.

A. It's to collect condensed moisture from the cooling coil 25. It's mentioned at Column 3 of the patent about Line 20, and following it says—I had better go back a little——

"The compartment 14 may have any number of divisions and shelves 27 and contains a drip collecting shield 28 by means of which condensed moisture from the cooling coil 25 is collected and drained through an outlet 29 either into a container 30 as shown or into a waste pipe."

(Testimony of Norman S. Parker.)

Q. So that that moisture might be the result of frost that had been melted, may it not?

A. To the extent that there is frost.

Q. Yes. And then, there is considerable moisture collected on the fins, is that correct, in the Potter arrangement? A. I would think so, yes.

Q. And so that there is a great deal, then, of moisture in the form of water which drains down from the coils in Potter and through the drain portion groove 28 and into the bottle 30. That's correct, isn't it?

A. I don't know that there would be a great deal. There [1458] is obviously——

Q. Well, there is a quart bottle illustrated. That's quite a bit, isn't it?

A. Well, if it were filled. The question is whether it's filled or not. I don't know whether there would be a great deal or not. There certainly——

Q. Well, now, how——

A. It's for moisture. It's expected to be some deposit of moisture.

Q. That's right. And where does that moisture come from? It comes from the air and food in the cooling compartment, does it not? A. Yes.

Q. So that to that extent there would be dehydration, would there not—dehydration of air and food in the cooling compartment?

A. I think there must be some in very wet foods. There undoubtedly will be some loss of moisture. Also in hot weather——

(Testimony of Norman S. Parker.)

Q. Well, now wait. Just answer my question Yes or No.

A. I can't answer it Yes or No, because it's the kind of a question to which an answer Yes or No is deceptive.

Mr. Cuningham: May he answer, your Honor?

The Witness: If you have the misfortune to live in the type of humid climate I live in in the summer in Chicago, [1459] the air is simply loaded with moisture and every time you open your refrigerator you circulate outside wet air into the interior of the refrigerator. I know that from sad experience.

Q. (By Mr. Byron): Well, do you mean by that that there is no dehydration in the cooling compartment whatsoever?

A. No, I don't mean that at all. I mean that there must be some loss of moisture in any refrigerator and there certainly is in Potter. What the amount of it is, I couldn't tell you. I don't know.

Q. That's right, it may be a great deal or it may not be so much, you don't know?

A. That I wouldn't know.

Q. You just don't know. All right.

I would like to have—I hate to cause all this disturbance and noise of getting those exhibits here.

(Whereupon the exhibits were moved by the Crier to the better view of the jury.)

Q. (By Mr. Byron): Mr. Parker, your attention is directed to three exhibits. One is the chart,

(Testimony of Norman S. Parker.)

114-A. Another is the portion of the physical exhibit 117, and 117-A, the last two being portions of the accused Admiral refrigerator. Now, looking at Plaintiff's Exhibit 117-A, I have placed this pointer in what I regard as the cooling compartment. Do you agree?

A. No. I regard as the cooling compartment that part of [1460] the Admiral structure, that space in the Admiral structure which is surrounded by the insulation which controls the temperature in the cooling compartment. This, to me, is part of the cooling compartment (indicating). But this is the food storage space in the cooling compartment which you pointed to.

Q. Do you cool food by placing it in the insulation?

A. You cool food by placing it within the insulation, in this instance within the liner.

Q. Wait a minute. Now, this is just becoming argumentative. You place the food in the cooling compartment, do you not? A. Yes.

Q. For what purpose? A. To cool it.

Q. Right. So that is the cooling compartment?

A It's in the cooling compartment.

Q. This metal——

The Court: I think Mr. Byron, there is a sharp difference of opinion between you and Mr. Parker.

Mr. Byron: All right.

The Court: And I don't think any useful purpose is going to be served to continue that line of interrogation.

(Testimony of Norman S. Parker.)

Mr. Byron: I think you are right, your Honor.

Q. Now, referring to this Defendants' Exhibit 114-A where Claim 2 is parsed, and referring particularly to Element 5 [1461] thereof, I wish to read a portion of that:

"A cooling refrigerant expander having heat conducting surfaces within said cooling compartment."

Now, by "expander," we are referring to a coil 25 in the Potter patent, are we not?

A. That's what Potter showed.

Q. That's right. And the cooling coil in the accused structure is the coil—the coil surrounding the side and back of the cooling compartment, is that correct? A. That's part of the system.

Q. Now, the cooling coils in the accused structure are not within the cooling compartment in so far as the space in which the food is placed, is that correct? A. That's correct. [1462]

Q. Now, then, you have also stated, I believe, that the cooling expander or coil or duct, part of it is found on the, attached to the plate of the primary transfer plate of the primary system; is that correct? A. That is true.

Q. You start, then, with the expansion pipe or tube attached to the primary plate. A cold zero refrigerant is passing there through; is it not?

A. That is right.

Q. Is that the surface of the cooling coil which is within the cooling compartment?

A. I am thinking primarily—after all, the surface which the claim calls for it, it is a surface

(Testimony of Norman S. Parker.)

which takes heat from the food, the initial surfaces which take the heat from the food is the liner.

Q. Let us refer to the patent in suit temporarily. Now, the coil 25 in the patent in suit is within the cooling compartment; is it not? A. It is.

Q. And its cooling surfaces are within the cooling compartment, that is correct? A. Yes.

Q. All right, now; that is not true in the accused structure. I would like to have you follow or point out the connection from the freezing coil forming a part of the cooling system [1463] which is attached to the primary transfer plate and explain how that can be construed as within the cooling compartment.

A. Well, the limitation we are discussing of the claim does not call for that. It says, it calls for heat-conducting surfaces.

Q. That is right.

A. Of the cooling compartment.

Q. I am speaking——

A. And here are the heat-conducting surfaces within the cooling compartment.

Q. Now, where is your connection between the freezing coil on the primary plate with its heat-conducting surfaces there connected to the heat-conducting surfaces within the cooling compartment?

A. Well, the Admiral manuals are very careful to point out it is important to maintain a good thermal contact between the transfer plate of the

(Testimony of Norman S. Parker.)

so-called secondary system and the transfer plate of the so-called primary system, and the heat within the moist cold compartment is removed by the coil on the primary transfer plate drawing heat conducted to it from and by the secondary transfer plate.

Q. I would like to have you take that step by step through each element.

The Court: Why doesn't he do that right after a short [1464] recess? Ten minutes.

(Thereupon, the morning recess was taken.)

Mr. Byron: I think I might shorten this cross-examination a great deal, your Honor, because I see that the patent expert, Mr. Parker, for plaintiff, and the engineering expert, refrigeration and engineering expert for defendants, are in hopeless conflict on certain points which I think are clear probably to the Court and to the jury, but just to emphasize what some of those conflicts are, just to touch them and drop them, I will refer to Defendants' Exhibit 114-A. I will refer first to that entire element 5 which I will now read:

"A cooling refrigerant expander having heat-conducting surfaces within the cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32 degrees F. while withdrawing heat from said compartment whereby air in said cooling compartment is cooled thereby to a temperature above 32 degrees

(Testimony of Norman S. Parker.)

F. and is maintained at a humidity whose relative value is at least 100 per cent at 32 F."

Now, there is one of the points of conflict in which you say that is perfectly clear and defendants' expert believes is indefinite and claims generally it is not [1465] entirely understandable. Now, that is the fact, is it?

A. That is a fair statement.

Q. Then the next element, 6:

"A freezing refrigerant expander having heat-conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature well below 32 degrees F. while withdrawing heat from said compartment whereby air in said freezing compartment is cooled thereby to a temperature well below 32 degrees F."

Now, defendant's expert says that is vague and this "constructed and arranged" is a function of thermostat and not anything to do with the construction of the expander itself, and you and the engineering expert for defendants are in conflict on that? A. Correct.

Q. Referring to elements 8, 9 and 10, which I will read:

"A single liquefying unit associated with said expanders and constructed and arranged to contain refrigerant expanded by heat extracted from both said compartments, the volatile refrigerant circulating through said expanders being the sole heat-extracting medium." [1466]

(Testimony of Norman S. Parker.)

Now, you are in conflict on that, you and the defendants' expert? A. Yes.

Q. In that the expert for the defendants says that there is more than the one liquefying unit, and you say there is but one, and he says that there are two volatile refrigerants and you say there is one, and you feel that the two are the same as the one, and you are in conflict on that point?

A. No, that is not the way I would say it.

Q. Well——

A. In fact, I would say your question does not represent my position.

Q. Well, you may state it. At least, you are in conflict on those elements?

A. We are definitely in conflict on the interpretation of that.

The Court: You may state your position, Mr. Parker.

The Witness: My position is, and this is as to the 8, that you read the language together and not split up into bits the term "a single liquefying unit associated with said expanders." In other words, there has got to be not merely a single liquefying unit but a unit which is associated with both said expanders, this liquefying unit being constructed and arranged to contain refrigerant expanded by [1467] heat extracted from both compartments, the volatile refrigerant circulating through said expanders being the sole heat-extracting medium.

To me, the fact that you have—in order to carry

(Testimony of Norman S. Parker.)

heat through the secondary system from the moist cold compartment to the part of the primary coil which abstracts heat from the moist cold compartment makes no difference, that is an addition, but you still have that single liquefying unit which is associated with the two expanders and which is constructed and arranged to contain refrigerant expanded by heat extracted from both compartments, and that is the only structure in the Admiral box which has those characteristics, and, to me, it is a single liquefying unit associated with the two expanders.

The other secondary unit is merely a heat-transmitting means for picking up heat and equalizing the flow of heat, getting the heat to flow through the liner surface to a point right back of the liner surface of the moist cold compartment where it is picked up by the volatile refrigerant which is the sole refrigerant which takes the heat from the two compartments. To me, that language is perfectly clear.

Q. In the accused structure, Mr. Parker, there are two systems or circuits, a primary circuit carrying one refrigerant—this is in the accused—and in the secondary [1468] another refrigerant; that is correct, is it not? A. That is correct.

Q. And those are two different refrigerants; are they not?

A. Well, I don't know what the refrigerants are. They are different bodies of refrigerants, separate bodies.

(Testimony of Norman S. Parker.)

Q. Do you know if there is any advantage in having one refrigerant circulating in the primary system and another refrigerant circulating in the secondary system? A. I wouldn't know.

Q. Well, I might tell you. It may refresh your memory.

Mr. Cheatham: Objection, your Honor.

The Court: Mr. Parker is not an expert. He just knows how to read a patent, and that is all he claims to do. I think sometimes he has gotten a little over it.

Mr. Byron: That is what I thought.

The Court: But you cannot ask him that question.

Mr. Byron: I thought perhaps I would be entitled to the same privilege on that. Well, be that as it may, the accused refrigerator is a cold-wall type, is it not?

A. Yes.

Q. And the Potter is a finned-coil type; correct? A. Correct.

Q. They are different structurally, are they not?

A. Yes, there are structural differences. [1469]

Q. What is that?

A. There are structural differences, yes.

Q. The potter patent has a freezing coil and the cooling coil in series, and the same refrigerant passes through both of them; correct?

A. That is correct.

Q. That is not so in the accused refrigerators, is it?

(Testimony of Norman S. Parker.)

A. No, I do not agree with you there. The only refrigerant which takes heat from the two compartments flows through the duct which is, part of which removes heat from both compartments, and those ducts are in series.

Q. I am afraid you did not answer my question, so I will have to ask it again, Mr. Parker. I think you argued another point.

A. I am sorry; I misunderstood your question.

Q. Let me put it to you again. The Potter patent has a freezing coil and a cooling coil in series, and the same refrigerant passes through both of those coils? A. That is correct.

Q. I say, this is not so in the accused refrigerators. In the accused refrigerators you have a primary freezing coil and a secondary freezing coil, and they are not in series, are they?

A. Oh, you mean the arrangement of the——

Q. The coils are not in series? [1470]

A. Well, the same—they are in series——

Q. Point out where they are in series.

The Court: Wait a minute; let the witness answer.

The Witness: Well, if you take—looking at 114-A—this does not show it so clearly.

Q. (By Mr. Byron): Let me put a simpler question to you, and then I think you can take care of it. Let us say that we have two sections of hose. We connect up the first section to the faucet for sprinkling the lawn, and then we attach the second

(Testimony of Norman S. Parker.)

section of hose to the first section. Those sections are in series, are they not? A. That is right.

Q. And the same water goes right through both of them? A. Right.

Q. Now, then, in a secondary system you have two different sections. You have one section through which—we will go back to the refrigerant—it flows, and then you have a separate circuit entirely through which a refrigerant flows; now that is correct, isn't it?

A. Yes, there is a separate refrigerant in this second circuit.

Q. That is right. That is all the question was. We brought out the fact that each coil in the accused, in the accused structure, has its own separate refrigerant.

A. Well, that secondary system has its separate refrigerant. [1471]

Q. That is all I asked. A. Yes.

Mr. Cuningham: Now, your Honor, I object. I think he has more answer than that.

The Court: You can bring that out on redirect. He asked the question. If you want to add anything to it, Mr. Parker, you are permitted to do it, of course.

The Witness: The way the question was asked, I think that is the complete answer. He asked me a simple question. I do not want to get argumentative. I would rather answer the question the way he gives it to me.

Q. (By Mr. Byron): Your attention is directed

(Testimony of Norman S. Parker.)

to Defendants' Exhibit 114-G in which Claim 2 is parsed, and an application is made in part to Gibson Patent 21941 and to the Admiral structure, the accused structure. Now, the Gibson patent discloses a secondary circuit, does it not? A. It does.

Q. It is substantialy the same in that regard as the accused structure; correct?

A. There are differences in detail——

Q. I mean, insofar as the secondary circuit is concerned they are identical; are they not?

A. Yes; that is right.

Q. Then you agree with the statement made in behalf of Potter in the file wrapper of his patent, 2,219,789, Page 27: [1472] "Obviously,"——

The Court: I think he ought to be shown the document.

Mr. Cuningham: It is a very limited-purpose document, your Honor. You recall the admission.

Mr. Byron: It is Exhibit 118.

Mr. Cuningham: That is the file wrapper, Potter.

Q. (By Mr. Byron): Just one question in connection with it, your Honor. Turn to Page 27, please, about in the middle of the page, and you will see a sentence starting, "Obviously."

A. Yes.

The Court: Show it to him, Mr. Byron.

Q. (By Mr. Byron): Well, do you see it?

The Witness: I see it.

Q. I will read a sentence to you. Check me and see if I am reading it accurately:

(Testimony of Norman S. Parker.)

"Obviously, Gibson does not have a secondary boiler in the food compartment."

Do you see that? A. Yes.

Q. Do you agree with that statement?

Mr. Cheatham: Your Honor, I think the witness should be permitted if he is going to answer that question, which I think is immaterial—be given an opportunity to read the whole document and study it and take that sentence in its context to see whether he can agree or disagree. [1473]

The Court: I think he can ask the question without regard to what Potter says, and I do not think it really makes very much difference what Potter says.

Mr. Cuningham: If your Honor please, that is the whole point, and it is certainly immaterial as to what this witness says about what Potter says.

The Court: Let me ask a question, Mr. Parker, supposing that Potter thought that the compartment was the portion where you put the food in and not the portion on the outside. Would that make any difference?

The Witness: Not to me, no, your Honor. I mean, what Potter or Potter's attorney said in some prosecution of some application for another patent, I do not think that I——

The Court: Suppose he said it in this patent.

The Witness: Well, if he said it in the patent itself clearly and put a limitation on himself, why, then, I might—I do not know; that is theoretical. I would have to see if, of course, to see what he said

(Testimony of Norman S. Parker.)

and what the context was and what is in the patent.

The Court: Mr. Parker, does it make any difference what Mr. Potter meant about the cabinet?

The Witness: I would not say that it made too much difference because, after all, Mr. Potter was not a patent lawyer. He might entirely misunderstand the technicalities [1474] of the patent law. I do not know that his impression of what is an equivalent or what is what would really make much difference.

The Court: In other words, if he thought that the inside of the cabinet where you put the food in was the place to have the coils, if it was described the way it was described in the patent, is it your contention that what Potter thought would be immaterial? It is what the language says.

A. I think what the language of the claim says construed in relation to the specification and drawings is what controls. Potter might even change his mind over a term of years, your Honor.

The Court: If you and some of the other people disagree as to the meaning of what the interior of the box means, what does that indicate? Here specifically Mr. Muffly says one thing; you say another. What does that indicate to you?

The Witness: Well, it indicates to me that in any patent, any patent language, there may be room for differences of opinion; otherwise, we would not have patent suits. I do not agree with Mr. Muffly, and Mr. Muffly does not agree with me. I have not heard Mr. Muffly say anything which leads me to think that I am wrong. My opinion as to how these

(Testimony of Norman S. Parker.)

claims read and as to how the language should be interpreted has not been changed by anything I have heard Mr. Muffly say. [1475]

The Court: Even if Mr. Potter agrees with Mr. Muffly, that would not make any difference to you?

The Witness: Even if Mr. Potter agrees with Mr. Muffly, that would not make any difference to me unless it was in this patent in suit in some way in which it would be actually binding on the holder of the patent in the context of the patent.

In other words, if in this reissue claim it said that all parts of the expander system, including the part where the refrigerant is evaporated has to be in the food storage compartment, that is in the claim, why, then, that is all there is to it, but the claim does not say that.

The Court: The claim does not state this term nor many terms; is that right?

The Witness: That is right.

The Court: Then you have to make certain assumptions?

The Witness: You have to make some assumptions. As I say, there is always some possibility as to a difference of opinion as to the language of a patent claim. If there was not, there would be any patent suits.

Mr. Byron: The cross-examination is closed.

Redirect Examination

By Mr. Cheatham:

Q. Mr. Parker, can you give us a rough estimate of how long [1476] it would take you to mark on

(Testimony of Norman S. Parker.)

defendants' charts, Exhibits 114-A to -R, by circles, the words "Yes" and the words "No" on which you disagree with Mr. Muffly?

A. Oh, I suppose I can——

Mr. Byron: I think that is improper to mar our exhibits.

The Court: The exhibits are the exhibits of the Court, and if he wants to mark anything up that is perfectly all right so long as they know it is not yours.

Mr. Cheatham: May he do it during the recess, please?

The Court: That is all right.

(Discussion off the record.)

Mr. Cheatham: No further redirect.

The Court: That is all, Mr. Parker.

(Witness excused.)

The Court: Is that the plaintiff's case?

Mr. Cuningham: Yes, your Honor. I have a certain worry about some exhibits, but I understand we can check those later.

The Court: It has been understood and we have agreed earlier, that even though you close your case you have the privilege of introducing exhibits which have been offered but not admitted. You cannot introduce any new exhibits.

Mr. Cuningham: No; no, I understand that.

The Court: You may check the record to see if

(Testimony of Norman S. Parker.)

an [1477] exhibit has been admitted or if it has not been admitted and it has been offered. You can do it at a later time.

Mr. Cuningham: I must say I think our record is pretty good at that, but I would like to check. That is all, your Honor.

The Court: Mr. Byron, do you have anything further?

Mr. Byron: Nothing further, your Honor.

The Court: I think what we ought to do now is take a recess until about 1:00 o'clock. That will give everyone an opportunity to collect their exhibits and do other things that are necessary. We are going to start argument this afternoon. I think we will be finished. We are going to try to finish the argument. You are excused until 1:00 o'clock.

(Thereupon, the jury retired for the noon recess.)

(The jury having retired, the following proceedings were had:)

The Court: Mr. Ramsey?

Mr. Ramsey: We renew the motion we made at the end of plaintiff's case and as an additional ground, on the ground of vagueness and indefiniteness, that that has not been spelled out more particularly as brought forward in the motion.

The Court: Did you read the memorandum submitted by Mr. Cheatham this morning on the question of amendment to [1478] the specifications?

Mr. Kolisch: I have just received it, your Honor. I have not had an opportunity of reading it.

The Court: You reassert all the grounds set forth in your written motion together with an additional specification of vagueness. I have the motion made previously, but I think that in the interests of orderly procedure this should either be read into the record or a new one filed, and will you do that by 1:00 o'clock this afternoon?

Mr. Ramsey: We will do it, your Honor. Would it be satisfactory if it is read into the record? It might be a little difficult to get it all rewritten by that time.

The Court: Yes.

Mr. Cuningham, this is the time I told you to make your motion.

Mr. Cuningham: If your Honor please, I have given, I must confess, only one copy. I had my own copy, and I gave Mr. Kolisch only one copy because that is all I had, and in that, Mr. Kolisch, is a document labeled "Plaintiff's Requests for Instructions to the Jury, 90, 91 and 92." Those are changed to a motion. I so move, your Honor.

The Court: You are moving now that certain issues be withdrawn from the jury. Will you read them into the record?

Mr. Cuningham: Thank you, your Honor.

I move that the following issues be withdrawn [1479] from the jury:

The issue of validity of the reissue patent, No. 23058, upon the grounds that the defendants have failed to sustain their burden as to this issue by the testimony of Mr. Muffly and the other evidence. [1480]

I further move for withdrawal from the issues to be submitted to the jury any issue with respect to the legal right of the plaintiff to maintain this action, upon the ground that the defendants have failed to submit sufficient or in fact any evidence that would negate such legal right.

I further and finally move to withdraw from the issues to be submitted to the jury any issue of infringement of claims 1, 2, 3, and 4 of Reissue Patent 23,058 upon the grounds that the defendants have not met the plaintiff's proof as to infringement and, in fact, have admitted in their booklets, service manuals, and by the testimony and in the patent of Mr. Morton that the secondary transfer plate assembly amounts to no more in substance than a mere fin attached to the primary transfer plate coil, which coil is in series with the primary freezer coil in both defendant structures.

The Court: All right. Plaintiff's motion is denied in toto. Defendants' motion will be taken under advisement. This is in accordance with our original understanding and the parties will argue the case, and under the Federal rules I have—I will have time to consider the motion at a subsequent time.

Now, we are coming back at 1:30 o'clock. I think that if Mr. Kolisch and Mr. Cheatham can come to my chambers at 12:30 we will take a quick run-down on the instructions [1481] and there may be

some questions that I want to ask.

All right. Recess until 1:30.

(Thereupon, at 11:50 o'clock a.m. a recess was taken until 1:00 o'clock p.m.)

Afternoon Session

(Court reconvened, pursuant to recess, at 1:00 o'clock p.m., at which time arguments were rendered by counsel for the respective parties, reported but not transcribed, at the request of the respective parties.) [1482]

United States District Court, District of Oregon
Civil No. 6016

MOIST COLD REFRIGERATOR CO., INC., an Oregon Corporation,

Plaintiff,

vs.

LOU JOHNSON CO., INC., an Oregon Corporation, and MEIER & FRANK COMPANY, INC., an Oregon Corporation,

Defendants.

and

ADMIRAL CORPORATION, a Delaware Corporation, and AMANA REFRIGERATION, INC., an Iowa Corporation,

Defendants-Interveners.

November 30, 1955

Before: Honorable Gus J. Solomon, District Judge.

OPENING ARGUMENT OF MR. CUNINGHAM

Mr. Cuningham: If your Honor please, Ladies and Gentlemen of the jury: I think I shall read this opening argument for the plaintiff because I think it is the only safe way in a case like this to be sure what you say and to be clear. I am afraid it will be not as interesting as if I were to extemporize, but I think it is better. So I shall stick to the book. I feel that way because I think it will be less interesting.

First off, I do wish to thank you on behalf of our client, Moist Cold, for your very patient attention to our efforts to piece together the important events and facts of the last twenty-seven years of the history of this patent in suit. I want also to thank each of you personally for the very courteous attention that you have given at the trial and to learning the tribulations of the parties in this case and the way in which you have been here every day and in which you have succeeded in devoting your constant attention to all of the witnesses here and the way you have surmounted the difficulties occasioned by the unusual snow and rain. I want to apologize for any act of mine that has caused the Court to reprimand me.

We patent lawyers are not very apt at jury trials and at the same time I want to assure you that every effort on my part was prompted by my belief in the justness of my [2*] client's cause and my desire to have you hear all of the evidence which seemed to me, perhaps erroneously, but sincerely

*Page numbering appearing at top of page of original Reporter's Transcript of Record.

relevant in this case. I am beginning to realize it is true that the patent lawyers try a case differently from other lawyers, and I have tried my best to get the facts before you as well as I have been able to do.

This case in which it is now your duty and privilege to determine is for the infringement of Reissue Patent 23058 granted December 14th, 1948, to the then owners of the original patent, 2,056,165, which had previously issued October 6th, 1936, as a result of an application filed on February 16, 1931. The original patent application was filed on behalf of Bronaugh and Potter, Mr. Bronaugh being the first witness you heard on behalf of the plaintiff, and Mr. Potter being the person whose deposition you heard and who now lives in New York City.

Mr. Bronaugh assigned his interest in the patent to Mr. Potter very early in the history of the case, and you heard him testify to his signature on the assignment. Various assignments of the patent have been made by successors in ownership until the last assignment which assigns the entire right in the patent to the plaintiff, Moist Cold Corporation.

The Plaintiff's Exhibit 17 is the certified copy of the assignments. I will just drop it here. [3]

The Court: All of the exhibits will be delivered to the jury at the time of their deliberation.

Mr. Cuningham: I said twenty-seven years of history, and that takes us back to about November of 1928. Actually, perhaps, the history should go back many years before that to the early days of Mr. Potter himself; however, we are concerned with

the present invention and will pick 1928 as a good point to begin. We hope that the evidence presented to you has caused you to cast your minds back to the peroid when this invention was created here in Portland; that is the era as of which you should appraise this invention, not as of now. It is difficult but really necessary for you to try to do that.

Beginning late in the year 1928 Mr. Bronaugh took charge of the Potter Refrigerator Company, first as Manager of the Potter Refrigerator Sales and then as President of the Potter Refrigerator Company when it was formed in March of 1929. It was late in the fall of 1928 when Mr. Bronaugh took charge of the manufacturing activities of the Potter Refrigerator Company which had been manufacturing refrigerating systems for many years. In casting your minds back we feel that you will have many reminiscing moments. This was near the end of the Roaring '20's just before the stock market crashed. This was the era of the Black Bottom, the Charleston, bobble skirts and Rudy Vallee. [4] This was the beginning of trans-continental aviation, and a man named Charles Lindbergh had just flown the Atlantic in a single-engined plane. It still took five days to get from here to Honolulu, and the iceman was making daily deliveries at most back doors throughout the United States of America.

A number of companies were then putting out dry cold electric refrigerators which had a small freezing coil to hold ice cube trays, and the Potter Company was competing with them in the Portland

area by installing its refrigeration systems in the old iceboxes; sort of funny to think of now when we consider our gleaming porcelain jobs such as the Admiral refrigerator, Exhibit 10-A, and the Amana refrigerator, Exhibit 10-B. However, it was serious then since no one knew exactly which way the business was going and ice was still cheap.

As a small company with a very limited local market, the Potter Company had to have consumer satisfaction, so Mr. Bade, whom—I am sure you will recall his deposition—the service man, came into the picture and his job, in addition to assembly and certain experimental work, was to make certain that the customers remained satisfied. There were other people in the Potter Company in contact with the customers and through them a picture of dismaying dissatisfaction slowly appeared. The ladies of Portland were not happy [5] with their modern convenience, the electric refrigerator, and some of them wanted the iceman back. Why? Well, foods dried out, salads wilted, butter absorbed odors from other foods. At first Potter and Bronaugh thought that this was the natural resistance to change which almost everyone encounters in promoting a new product, and they thought that a program of education would show the ladies of Portland that they were wrong and that Mr. Potter and Mr. Bronaugh were right. However, by the spring of 1929 they were convinced that they, not the ladies of Portland, had been wrong. They faced this fact, and what they saw was an alarming prospect. If there was no satisfaction, there would be no more

sales and the company would surely fail. Something had to be done, and they set to work, holding numerous conferences and scribbling on pieces of paper, which Mr. Bronaugh told you that he used to throw in the round file 13 on the floor as soon as they had served their purpose, and which Mr. Herrmann and Mr. Potter have also mentioned.

Both Mr. Potter and Mr. Bronaugh have stated that it was through their joint efforts that an idea was slowly and laboriously born. Thus the first phase of this invention had arrived, the recognition of a need in the art which had not been apparent to those skilled in the art.

Mr. Potter had had several years of experience [6] with his compressor and with his dry cold refrigeration system. Mr. Bronaugh was a natural-born mechanic, as Mr. Potter testified. Mr. Bronaugh was a failure as a salesman but a success as a plant manager. Mr. Bronaugh had always played with machinery. They put their heads together and shifted ideas back and forth until it became apparent that what they needed was a two-compartment box, one for food to be kept moist and cold, as foods were kept in the old icebox which the ladies of Portland were accustomed to using, and another for making ice cubes and frozen desserts and keeping frozen foods such as the Birds Eye frozen vegetables, where were just beginning to appear on the market in any quantity. Thus, sometime in the spring of 1929 the second step in the creation of an invention came about.

Invention is a two-step process: First the mental concept, and then the physical reduction to practice of the idea. That constitutes invention in our jargon.

Now, of course, merely seeing what needs to be done doesn't mean that it can be done. It is just like Jules Verne when he wrote in the 1880's about a trip in a rocket to the moon. No one yet has been able to do it. So, as in the launching of any new invention, the inventors started experimenting, using for their first experimental models old iceboxes, Fir-Tex insulation board, old radiators [7] and evaporators, and the Potter refrigeration pump which was readily available to them. The first box which they made had the freezing compartment beside the moist cold compartment, but essentially all of the elements of the combination were there. No sooner was one box made than they tried another and another, as Mr. Bronaugh and Mr. Potter have verified. Also verifying that were Mr. Herrmann and Mr. Bartlett and Mr. Bade, all disinterested witnesses to these important facts, the facts of dates.

Tests were run constantly, and finally they achieved their desired result of a food freezing compartment which could be maintained at a temperature of 10 degrees Fahrenheit and a moist cold temperature of 40 degrees Fahrenheit in the food cooling compartment and a temperature of minus 10 degrees Fahrenheit in the ice cube freezer, all this, of course, in one box under the control of a

single thermostat and operated by a single refrigerant liquefying unit.

This has been amply corroborated by the testimony of Mr. Bade, the service man, who you will recall came to work in June of 1929 and states that the experimental boxes were being tested in October of 1929 by Mr. Bartlett, the salesman who came to work for Potter in November of 1929 and saw the experimental boxes being tested during his [8] first month or two of work; and by Mr. Herrmann of Eugene who then had charge of the shop who corroborated this, also. Mr. Herrmann came to work for Mr. Potter in the early summer of 1929, and the boxes were built directly under his supervision. By the spring of 1930 the inventors had successfully completed, tested and proven their invention to their own satisfaction. Others had witnessed the tests. In the spring of 1930 the invention was completed by an actual reduction to practice. That is the date of the invention in suit.

The invention having been proven, Messrs. Bronaugh and Potter proceeded to build a commercial model, just as any prudent manufacturer builds commercial models today. Mockups—at first crude boxes—were built, one of which was called the Barry box. It has been so-called throughout this case because it was Mr. Barry who bought it. [9]

A different style of box was built by them in the early summer or fall of 1930. This was a wooden box built by the Matthews Company here in Portland and incorporating a brine tank and other metal

parts fabricated by the Anderson Company here in Portland. Ladies and Gentlemen, we have that box here. It is not this one; it is the one covered up by these exhibits, and you can just glance at that and compare it mentally with the large drawings that you have seen several of. Here is one on Exhibit 9-A-1. You will see the exact correspondence. That, we are fortunate and proud to say, was the model for the patent drawing.

Of course, Mr. Bronaugh and Mr. Herrmann have both identified this. Mr. Bade said he worked on it. Mr. Bronaugh stated that he knew it because he built it. Then a metal-covered box of the same general type was built, and that is the one I first went to, after that five more, then six more. Mr. McChesney from Seattle bought this particular box, the one I have just opened and referred to, 11-A. He bought the box in June of 1931 and used it in his home until 1950. When he bought it, he replaced a two-year-old conventional dry-cold refrigerator which he testified was in good condition. Plaintiff's Exhibit 22, which is a black photostatic copy of a letter of September 12, 1931, a letter from Mr. McChesney to the builders of this box, extols the virtues of the box and states his complete satisfaction with its operation and the [10] solution of the problem. This is a 24-year-old letter. This box about which Mr. McChesney has testified is Plaintiff's Exhibit 11-A, and, as you know, is here on the floor alongside these modern shiny boxes. The actual drawing, as I said, of the patent was made from this particular box as stated by Mr. Potter. Mr.

Parker, plaintiff's expert, said that he would be surprised if the drawings of the patent in suit were not made from drawings of that box, and the defendants have brought forward no evidence to disprove his identification. These dates are always important, and that is the purpose of dates.

Mr. Potter—and so I will not appear to be mysterious about it, the reason we are anxious for these dates is the Gibson patent, which, as the charts and all the records show, has the file date of September 30, 1930. We antedate or come ahead of the Gibson patent, and we won't have to bother with it.

Mr. Potter then filed his patent application in February, 1931, and the patent was granted as previously stated. Now there is a popular misconception that the filing date of a patent application is the important date, but we trust you realize, because of our careful attention to the evidence supporting the history of the invention prior to the filing date, that that is not always so, and in this situation with which we are concerned now here in Court, [11] the important date is the date of actual reduction to practice of the invention in a proven model which is demonstrated to achieve the results sought by the inventors. That is the important date in this case, and we think that we have proved beyond a shadow of doubt that the invention date was no later than the spring of the year 1930. There may be differences in the exact date which each of the five mentioned witnesses remembers, but all agree that the first complete and successfully

proven refrigerator embodying the system of the patent was created, operated and tested sometime between the fall of 1929 and the spring or early summer of 1930. Gibson has September 30, 1930.

Mr. Potter then went to Buffalo in the spring of 1931, shortly after filing his patent application through the attorney here in Portland, because by that time he had realized that in order to launch the new product on the market he had to go to the source of cabinets, just as most of the refrigerator manufacturers have at one time or another in the past and still do today. So he moved to Buffalo where the Jewett Company was making and engineering the very finest iceboxes then known in the United States, and he made arrangements for them to supply him with cabinets into which he could place his pump and his refrigerating system. You will recall the deposition of Mr. Bommer read earlier in the case. You may recall, and I shall recall it to you, that he left his [12] position as Chief Engineer of the Jewett Company, this fine engineering and refrigeration engineering concern, to come as chief engineer of Potter because of his conviction in the potential of this invention, and he is today one of the best qualified men in refrigeration engineering in this country, as I think the deposition clearly states.

It was not until sometime in 1932 that the Tri-cold refrigerator was launched. It very shortly later thereafter became the Potter Refrigerator Company. This launching was accompanied by the 20-page advertisement in the Electrical Refrigeration

News of February 24, 1932, as exemplified by Plaintiff's Exhibit 3-U and is bulky but not hard to read. It shows the launching of this new invention. Numerous witnesses, including General Electric Company's Mr. Quinn—he was then the Manager of the General Electric Appliance Division and later became vice-president in charge of the Appliance Division of General Electric Company—and Mr. Zimmerman, who was then his assistant and later became manager of the Appliance Division of General Electric Company, and they have both had depositions in this case as to the tremendous impact that this announcement made upon the refrigeration industry as a whole. You heard the depositions of these gentlemen concerning the efforts of Frigidaire and General Electric to satisfy the public demand which was slowly creeping into their consciousness at this late date. They put out hydrator pans— [13] that is, Frigidaire did—and the General Electric Company put out two refrigerators bolted together and to operate at different temperatures, all to meet this problem of dehydration. That these great companies with their research departments had not previously seen the need or made any attempt to meet it is a tribute to the foresight of Mr. Bronaugh and Mr. Potter. It is more than that. It demonstrates that this invention was not obvious. In fact, it seems absurd to me to assert, as defendants do here, that the invention was obvious to all. The cold, silent facts of history prove how absurd that is. If it had been obvious, why didn't others

do it? They had the means at their command. It was a new combination of really old elements, and Potter and Bronaugh were first.

The defendants have challenged the operability of the Potter refrigerator which was produced in Buffalo, and we have met that, we submit, by demonstrating with defendants' own Exhibit 116, the little Potter, the newest Potter in the room I am sure you all recognize, which was identified by Mrs. Kobernuss. She was the home economist for the Potter Refrigerator Company in Buffalo during those early years. She identified it as the type which she sold and helped to sell. Mrs. Kobernuss has demonstrated the satisfactory operation of the refrigerators produced by Potter in Buffalo and testified as to having helped sell several hundred, all of which replaced conventional, almost altogether replaced conventional [14] electric refrigerators in the home.

Now, like any newcomer in an entrenched industry, the Potter Refrigerator Company in Buffalo encountered difficulties. Jewett could not supply cabinets for Potter. Apex and Sanitary who were, incidentally, licensees and substantial licensees under the Potter patent, gave up supplying cabinets to the Potter Company while they kept on supplying cabinets to other more established companies, the big ones in the industry. Cast your minds back again to the troubled times in 1938 and Munich in 1939, and the Blitzkrieg in 1940 and Lend-Lease, and remember 1941 to 1945. Eventually during this period steel was cut off for most civilian

uses, but in the period about which we are concerned, 1938 and on, other manufacturers were nevertheless able to obtain cabinets from the cabinet manufacturers and to put out electric refrigerators embodying the invention of Mr. Potter and Mr. Bronaugh. Potter was unable to do so as a newcomer in the business, and eventually there was nothing left for him to do but to bring suit in 1943 against one of the infringers. During the course of that trial, and of its outgrowth, the details of which we will not bother you with, a defect in the original patent appeared in the claims which required correcting. In June of 1948 an application for reissue of the patent to cure this defect in the claims was filed, and the Patent Office after carefully considering the matter [15] again granted a patent, namely the reissue patent here in suit, on December 14, 1948.

This suit, Ladies and Gentlemen, was filed here, the birthplace of the invention, in 1951. It was originally against two local defendants, as the Court has told you. The two manufacturing companies, Admiral and Amana, as we hoped and invited them to do, have stepped in and taken over complete charge of the suit and are responsible entirely, so that local defendants are not now involved in any respect whatsoever. Suffice it to say that the patent was held in this case to have been properly reissued —here this very case—and you are now here determining the factual questions of whether the patent is valid over certain objections which you have

heard the defendants advance, and whether the patent is infringed by the Admiral and Amana refrigerators of the two-compartment type.

You have heard that it has been agreed by all parties that the Admiral refrigerator here in Court, Exhibit 10-A, is representative of all Admiral refrigerators of this particular type, of the accused type, so that you need pay no attention to model numbers and can consider all of the Plaintiff's Exhibits 4-CC-1 to 4-CC-6, the Admiral Service Manuals those are and they are a little obscured because they are filed along with other papers in what is labeled "Answer to Interrogatories Addressed to the Admiral Corporation," and [16] I believe with that Exhibit 4-DD, the answer of Amana Company, go hand in hand. They contain the Admiral Service Manual and Plaintiff's Exhibit 8-A-1, this large chart to which I am now pointing, and other large charts—strike that—just this chart and large diagram here which to my mind most clearly represents what we are talking about. It is almost as clear as the physical exhibits, taken directly from these Admiral Service Manuals, and you may consider that as representative of all of the defendants' refrigerators.

You have also heard that it has been agreed between all the parties that if it is found that the Admiral refrigerator infringes the patent, then you may likewise find that the Amana refrigerator as herein exemplified by Plaintiff's Exhibit 10-B, the physical exhibit, also infringes. We have therefore

confined our testimony to the Admiral refrigerator illustrated in Exhibit 8-A-1, and we suggest that you confine your attention to that likewise.

Now to go back to the period following the war. The successors to the Potter Refrigerator Company have their patent in December of 1948. The patent has for the second time been examined by the United States Patent Office Examiner and been twice considered over the patents which are listed at the end of the copy of the patents. That is the certified copy of patent, Defendants' Exhibit 2-B. Incidentally, that list includes the most important prior art relied upon by the [17] defendants here, and that merely means that those prior patents were before the Patent Office. You will remember the Davenport patent, 1,731,711; and another, 1,769,112; and another, 1,769,117, and, above all, Anderson Patent No. 1,439,051. Those were all considered by the Patent Office. Now, Mr. Muffly, the refrigeration expert with his collection of 100,000 patents, who testified for the defendants here, said that the greater part—no, he said that a little less than half of that collection, a little less than 50,000, were issued prior to 1925, and he told you on cross-examination at the close of the defendants' case that in his opinion this Anderson patent was the closest prior art to the patent in suit. That is a great aid and simplification for all of us. Accordingly, we suggest that you forget all the confusing testimony about the Davenport patents and concentrate on Anderson as being the one most likely to

help you in determining whether Messrs. Potter and Bronaugh had an invention. One would think that a patent which had been twice passed by the Patent Office and had survived the litigation to which it had been subjected would draw people eager to produce this refrigerator of proven value, under a license. But Mr. Potter found that such was not the reality. Admiral Corporation was on the market with its Dual-Temp refrigerator. You will see from this stack of advertisements of Admiral Corporation, Exhibits 3-LL-1 through to the end of the series, that the [18] advertisements run from prior to 1948, the date of the reissue patent, right through to almost the present time. Here was a well-established company on the market that seemed to be appropriating the Potter and Bronaugh reissue patent after it had come out in December of 1948. There was nothing left to do but bring this suit.

You may have heard the defendants advance their argument that a patent is a contract between the Government of the United States and the inventors whereby, as the Court has advised you, the patentees are granted the right to exclude others from manufacturing, using or selling the invention for a period of 17 years. In this case, remember it is 17 years from the date of grant of the original patent and the reissue patent is substituted for the surrendered original patent as of the date of its grant, the reissue grant, which in this case is December 14, 1948. That means there can be no recovery for any period prior to December 14, 1948.

the original patent being surrendered necessarily in order to get the reissue. However, of course, the reissue cannot run from its grant for 17 years. It runs only for the balance of the life of the original grant, which was for 17 years from October 6, 1936, so that brings us to October 6, 1953, a little over two years ago when the patent in this suit expired, and there can be no recovery after that date. It has gone into the public domain. In fact, when this reissue patent [19] was granted, it had a little less than three years of its 17 years of life. Mr. Potter and his backers had taken the risk on this patent in 1931 and '32, and prior actually, and the company, as you will recall, was started in Buffalo in 1931. By 1951 it was realized by Mr. Potter and his backers that there was nothing left to do except to bring suit against the infringing manufacturers in an attempt to recapture the losses which he had sustained, or, rather, which, as you have heard him testify in his deposition, his backers had sustained. About one million dollars had been poured into Mr. Potter's attempts to establish his patent rights over that 27-year period.

Now we fully agree with the defendants' contention that a patent is a contract granting the right to exclude others from manufacturing, using or selling, but it is more than a mere contract. As I told you in our opening statement, we like to think of it as a headstart on competition. That is what we think a patent really is. You must look

back to the early days when the founding fathers of the Republic were framing the Constitution of the United States. In that Constitution they saw fit to provide that Congress shall have the right to provide legislation to promote the useful arts and sciences. It is under this constitutional provision that our patent laws were framed. We like to look at this as being one of the reasons for our country's greatness, the necessity [20] for which was foreseen by the framers of the Constitution. Remember that this was then a small country fighting the ties by which Great Britain hoped to draw materials from the wilderness colonies of America and utilized them in fabricating finished goods at home. This provision of the Constitution was framed in order to encourage new industries and to give the entrepreneur a headstart on competition. It does not always work out when the realities are known.

We think that defendants' quibbles in this case, if they were sustained, would be a travesty on justice, their contentions about vagueness, lack of words such as "fin coil" in the specification, no definition of "air" or air at 32° Fahrenheit and the like. Fortunately for this country and the encouragement of future inventions, we usually have applied common sense to these problems and have established the rule that the disclosure in a patent application is addressed to the person skilled in the art. In other words, if anyone skilled in that art can construct the invention by studying the patent in the light of his special knowledge in that art, then it does not matter that the i's were not dotted

and the t's were not crossed. You have heard Mr. Muffly, the defendants' own expert in the refrigeration art, state that he could construct a refrigerator according to the patent disclosure. Why should inventors be penalized because lawyers can quibble about words? We think you will [21] see the right solution to this question and decide it forthwith in plaintiff's favor.

Incidentally, it speaks cogently of the weakness of the rest of defendants' defenses in this case. The Court has told you that there is a presumption of validity in favor of a patent and that there is the heavy burden on the part of defendants of proving that the patent is invalid by clear and convincing evidence. He has also told you in the beginning of this case that the plaintiff, we, had the burden and the definite burden to prove infringement by a preponderance of evidence as we lawyers speak of it. We think these defendants have utterly failed in their attacks upon the validity of the patent by these technical quibbles or by anything else. I know that to me their only evidence in this case, as presented by their expert, Mr. Muffly, was anything but clear and convincing. In fact, I found it very confusing and unconvincing. The same is to be said about their attempts to invalidate the patent on prior art patents, some of which are not even prior. We suggest that you consider just one, for example, the patent to Lundgaard about which Mr. Muffly testified. You will notice that he was clear and convincing in most respects when it came to something about which there could be no doubt, such as there

being a cabinet present; but when he was asked the direct question in regard to the Lundgaard patent as to whether there was a "refrigerant expander in the cooling chamber," he equivocated [22] and the Court stepped in and asked him if his answer was "Yes" or "No"; whereupon, he said that there was a misuse of the word "expander" in the patent. The same is true about all their efforts in regard to the Davenport patents and others. The same is true of the Larkin patent. You will find in every one of the patents the admittedly—we have admitted these things—old patents of the Potter combination. If they were not there, the defendants would not bother to read them. There is a coil in one, certainly, a cold wall in another, a compressor in a third, and so on, but is that any clear and convincing evidence that other inventors anticipated the Potter and Bronaugh combination, invention combination of old elements, a combination of what is new, no single old element, and that is true of almost all patents in the United States. They are all combinations of things that were known before. We do not think that is the answer, and we trust you will not find it is.

You will notice that so far I have limited my remarks to the attack upon the validity of the reissue patent in suit, since this is undoubtedly the first question which you will be asked to consider; namely, is the patent valid. We want you to consider the evidence in this order and in doing so we

suggest that you remember the one significant question which was answered by Mr. Muffly on cross-examination, that the Anderson patent was selected by him from his collection, [23] or by somebody with his approval, as the closest prior art, and dismiss the rest of the confusing testimony concerning the other patents, most of which have been considered in the past by the expert examiners of the United States Patent Office.

Also, in connection with the question of validity, we come again to a question about which there is confusing and unconvincing testimony, not the clear and convincing testimony required to overcome the presumption of validity of the patent. This has to do with the Larkin patent. The defendants have gone to great effort to try to plant in your minds that the mere substitution of a finned coil for a plain coil of the Anderson patent was all that Bronaugh and Potter did to solve this problem that had long plagued the refrigeration industry. [24]

We are certain that you see through this muddying of the waters and realize that it is the giving of the new and useful household tool of the modern dual-temp refrigerator to the housewife which Potter and Bronaugh first achieved. We have admitted from the very first of this litigation four years ago that all of the elements including the Larkin coil are old—and Mr. Bade, the service man, testified that he put a Larkin coil on the first of the experimental models. Potter and Bronaugh saw the need for and contrived the entire combination which produced an operative unitary structure in which all

elements co-act with each other; a single compressor operates to produce the desired results of moist cold humid atmosphere for preserving lettuce and the like in one compartment and for freezing meats and vegetables in another compartment.

What has Larkin got to do with this? The confusing thing which defendants have thrown into the picture and which we are sure the Court will straighten out for you in the instructions is in regard to the dates of the Larkin patent and others thrown against the patent in suit by these defendants. Remember and pay attention carefully to the Court's instructions as to when a patent becomes a part of the prior art.

Let us take the Anderson patent and examine it. [25] Certainly that was truly prior art. That is 1922 and applied for in 1918. But you have seen how the defendants' refrigerators depend upon the transfer of heat from the compartment liner to the tube which carries the expanding refrigerant through "permagum," which is defined in their own service manuals and in the Morton patent as being a mastic substance which is loaded with aluminum filings or the like so that it makes a good heat-conducting medium. In other words, it is just the same as soldering or brazing the coils together. That is the sticky stuff that we are all afraid to get on our clothes.

In Anderson there are pipes running around the inside of the upper compartment, which is just exactly like the old cold storage house which had been in existence since the turn of the century.

I really hesitate to move this to show you the old icebox. You heard Mr. Parker state that there was no mention in the Anderson patent of any control of humidity; no mention of moist cold atmosphere and, in fact, no teaching of the true problem of solving the concept of the combination of Bronaugh and Potter. Certainly, just as in the Davenport patent and others, there is a compressor or liquefying unit and there is an expansion valve. Certainly there are two coils in series, but this is nothing more than two compartments of the old dry-cold refrigerator. [26] What did that do for the housewife in 1922? Nothing which a one-compartment dry-cold refrigerator could not have done.

When you come to consider the Anderson patent, remember this and keep it well in mind: Mr. Muffly, the expert for the defendants, testified that there is a thermostat on the partition between the two doors of the Anderson refrigerator. If you look for it and carefully read the Anderson patent to find any such statement about the location of a thermostat, you will never find it. We have tried. There is mention of a thermostat on the first page. Incidentally, quickly after the mention of the thermostat there is a disclaimer of it as any part of the Anderson invention. Now, that is so much for Mr. Anderson's appreciation and solution of the problem.

Now, you heard Mr. Parker testify on direct examination that Anderson embodied a frosting coil in the upper compartment. Mr. Muffly did not offer any evidence of any test to the contrary. In fact, he

agreed that it did embody a frosting coil. A frosting coil, of course, is a moisture pump; that is what dries out your food. All that Mr. Muffly stated was that in his opinion it was the same as Potter and Bronaugh. And we are certain that you know how to evaluate that testimony when he has testified that he has collected over one hundred thousand patents during the course of his career since 1925 to 1930, almost [27] all relating to refrigeration, and that during that period of years he has been paid to search patents by all of the big refrigeration manufacturers except the two electrical refrigerator manufacturers, Westinghouse and General Electric. He is now on retainer of a number of refrigerator manufacturers and has recently, within the last ten years or last few years, done a number of jobs for Admiral and Amana. Remember that Mr. Muffly is not a patent lawyer, he is not registered to practice in the Patent Office, and that his livelihood since about 1940 has depended, at least in part, on his making searches for the refrigerating manufacturers.

We come now to the question of infringement, and here again all that the defendants can do is to quibble about words, and they do it in a confusing manner by confusing an unrealistic division of the language of the claim and saying "Yes" or "No" to only parts of an element of a claim. Their charts will be clear as a matter of English when you look at them. They say "Yes" or "No" as to whether these parts of elements are in the Admiral box or in the Amana box and as to whether they are in

the Anderson patent or in the Potter and Bronaugh patent. They have a breakdown on their Exhibits 114-A to -D and some other 114 exhibits, -O to -R, inclusive, of each of the claimed elements of the patent, and they have applied these in a highly confusing manner. They are not even able to be consistent in their [28] own charts. They point to a thermostat in one position on Chart 114-A and the same thermostat in another position on a second chart—the same element for thermostat, 114-C, just as it suits their convenience so as to be able to twist the remainder of the phrase which relates to the thermostat.

Of course Mr. Parker has today brought out these differences, I think, very clearly.

Mr. Cheatham: That number was 114-B.

Mr. Cunningham: 114-B instead of 114-C.

Now, in order to put the claims and their application to the infringing structure in their proper context you must go to the claims printed in the patent and read each element between the comma preceding that element and the comma succeeding that element. That is just simple ordinary rules of reading in between commas, those sets of elements. They have always been in the patent since it issued in '48. For example, the claim calling for a thermostat responsive to the temperature in the cooling compartment, when you get down to Claims 3 and 4, whereas Claims 1 and 2 call for a thermostat responsive to the temperature in one of the compartments; not a difficult difference. This is clear

enough to the defendants with respect to Claim 2, and their arrow from that element points up to the thermostat at the right-hand side of their chart in 114-A, the thermostat [29] which is supported by the upper freezing compartment. But in their Chart 114-B their arrow from the same element of the claim points to the thermostat which controls the by-pass valve and which is over on the other side of the refrigerator, the left-hand side of their Chart 56 of the Admiral refrigerator.

The answer to all this double talk is that the thermostat in Claims 3 and 4 is stated as being responsive to the temperature in the cooling compartment for controlling the on and off cycle of the single liquefying unit, the motor compressor unit down at the bottom of the cabinet. If, as defendants say with regard to Claim 4, the thermostat in the claim is the one on the left-hand side which controls the by-pass valve, they are deliberately attracting your attention to something else in the hope that you will overlook the thermostat which controls the on and off cycling of the liquefying unit on the right-hand side of the box. You have heard Mr. Parker read from their own service manuals and from the patent to the effect that the thermostat on the freezing compartment controls the on and off cycling of the liquefying unit and that this thermostat reflects the temperature in the lower moist cold compartment since the insulation between the two compartments is thinned out in that area so that heat from the moist cold compartment can

be drawn to the coil which surrounds the upper freezing [30] compartment. Common sense will tell you, in addition to the positive declarations in their service manuals and in the Morton patent, that if it were not for the power supplied to the motor in the heat pump the compressor of the liquefying unit in the bottom of the refrigerator, the heat in the moist cold compartment would stay right there since that space is normally closed by the lower door of the Admiral refrigerator and it would soon become a hot box rather than a means of preserving food in a moist cold atmosphere.

Mr. Parker testified that if the defendants' Exhibit 117-A, the moist cold compartment with its coils and the black goop on the outside, were all alone nothing would happen to the temperature in that box and no heat could be removed or withdrawn, as the patent says, from it by the secondary system on the outside of the box—to the outside of the box—withdrawn to the outside.

He testified that it is only when the two portions of the box, Exhibits 117 and 117-A, which make so much noise, are combined in the manner disclosed in the service manuals and in the Morton Patent 2,586,853, in a refrigerator cabinet that heat can be pumped out of the moist cold compartment and discharged to the air surrounding, the atmosphere, through the medium of the liquefying unit condenser.

I think I will stop reading for just a [31] moment. I ask you to look at it this way: In my simple language heat, of course, flows only from hot

to cold like water flows only from a higher level to a lower level. And in a refrigerator to make it refrigerate you have got to pump the heat up hill out like you have got to pump water out of a well. It's as simple as that. Now, just what does the pumping-out? Not this little secondary here which is wholly closed and has its own separate refrigerant—that is a whirlpool, actually; all goes around, and where does it come out if it were alone? In fact, what makes it work if it were alone? It is really an elaborate fin and a fin is a heat-exchange extension surface. It is a fin for this. The whole primary system. It is as if this had the fins of the Potter coil. Here is your liquefying unit and your condenser that gets rid of the heat in the atmosphere. Here is the refrigerant circuit going up to two coils in the primary circuit and in series with the same refrigerant in both. It goes first to this coil which isn't off by itself. Here are the bolts attaching it very tightly to this heat-transfer plate, secondary transfer plate—to this elaborate fin. It's a wonderful idea. A lot of patents have been issued on it. That is what the Morton patent is on. But that has nothing to do with us. You have improvements; you have patents of twenty-five years. So, here you have a system, the precise Potter system which I am sure [32] you understand. There is just nothing that could be clearer and simpler. It is the same refrigerant through two coils in series working in the same old way to get exactly the

same result with many recent improvements over the twenty-five years.

We now come to the points of absolute disagreement. Mr. Muffly has testified on direct examination that the cooling compartment is the space inside the moist cold compartment liner and that the freezing compartment is the space inside of the freezing compartment lined. I almost hesitate to go into it because we have heard so much about it. We ask you to consider whether an air space alone makes a compartment a refrigerating compartment or makes any kind of a compartment, as far as that goes. The only thing that makes a compartment is the physical structure which surrounds the air space; and I ask you, did you ever see a refrigerating compartment without insulation? The claims define a cooling compartment and a freezing compartment, and we ask you how there could be any such item in either of the infringing refrigerators or any refrigerator unless there were insulations surrounding the liners of the air space to hold out the heat from the outside temperature so that the liquefying unit or the heat pump, or compressor, or whatever you want to call it, can operate to withdraw heat from the compartment. [33]

We come now to another point of plain disagreement. Defendants say that the Admiral thermostat —Amana thermostat which controls the on and off cycling of the unit is outside of the compartment and not physically inside solely because it is shown in the reissue patent. And I emphasize the words "shown to be on the inside of that compartment"

in the patent. The thermostat as you will recall is this little thing up in the corner 31 of the reissue patent shown in the compartment.

Now, the defendants conveniently distract your attention from the fact that the claim of the reissue patent does not say—none of the claims state that the thermostat must be physically inside of any compartment, cooling or freezing. That is just a matter of English. I want you to read it for yourself. The claims state that it should be only a thermostat, and I quote, "responsive to the temperature of one of the compartments." That is in Claims 1 and 2 and it is the same language in the other claims.

Let us look to see what happens in a refrigerating system. Both parties agree that when the liquid refrigerant expands into the tube of the expander it extracts heat from somewhere. Where does this heat come from? Since the tube of the expander is inside of the insulation, it naturally draws heat from within the compartment. That heat is taken into the expanding refrigerant and raises its temperature. [34] The thermostatic valve which controls the on and off cycling of the liquefying unit in the Admiral refrigerator is right along side of the tube carrying the heat-laden refrigerant. It therefore responds to the temperature of the compartment from which the heat is drawn. That is what the claim says and that is all it means; no more, no less.

And now we come to still another point of disagreement. They say that the expanders called for

in all four claims—the cooling refrigerant expander and the freezing refrigerant expander is only the bare tube in which the expansion of the gas takes place. They neglect all the surface extension of that tube. We say that you must take the entire phrase again between the commas in the claims—these are the words of the claims of the patents and read, and I quote, "a cooling refrigerant expander having heat-conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature about 32 degrees Fahrenheit while withdrawing heat from said compartment." That is the whole element of the claim. It is long, I know, but not impossible by any means. I think it is rather simple. There is no disagreement between Mr. Parker and Mr. Muffly that the actual temperature within the tube of the expander—that is, tube 25 in Potter—and the tube which conducts the refrigerant across the heat-transfer plate in the Admiral box must be [35] below freezing, or below 32 degrees. The actual surface of just the little tube itself which conducts the expanding gas may largely be or perhaps is always below 32 degrees. However, when you speak of an expander having heat-conducting surfaces, you are talking about the elements which extend the heat-withdrawing ability of the tube beyond the little surface of the tube. In the Bronaugh and Potter reissue patent this is exemplified by the brine tank in the freezing compartment. It has one vertical surface forming one inside wall—that is where the little ice cube sleeves

are and the vertical surface is to the left of it—one inside wall of the frozen food compartment. It also is further exemplified—and I think maybe I should have put this first—by the fins on the coil heat-expansion surfaces in the upper cooling compartment refrigerant expander. Those are closely spaced fins in tight contact, metal to metal, as explained, of course, in the patent and elsewhere; all well-known facts. Finned coils were old.

In these respective compartments these are the surfaces which extract the heat. They are part of the expander or evaporator or coil, whatever you want to call it, and conduct heat to the tube and thence to the expanding refrigerant within the tube. When we come to the infringing structure they say that it is the secondary tube on the outside of the surface which does all the heat extracting from [36] the cooling compartment liner. Why, then, do they feel it necessary to have all this labyrinth of loops of the tube of the primary system on the outside of the primary transfer plate and the coil of the tube on the inside of the secondary transfer plate which I pointed to a little while ago? Why do they instruct in their manuals that you must apply a layer of permagum, the heat-transferring gum, between the plates? Why do they feel it necessary to surround the tube on the liner of the cooling compartment with all this permagum? Why can Morton say in his patent, as he does, that this may be considered a fin? Mr. Morton is the Admiral chief engineer and chief patentee,

and I think the testimony of Mr. Siragusa was to the effect that he knew more about patents than anybody in the Admiral Corporation. Well, he can say it is a fin because the heat may be withdrawn from the compartment through the metal of the liner, through the secondary system, through the permagum between the heat-transfer plates and into the primary system. Otherwise it just wouldn't be a cooling compartment. The same is true of the freezing compartment liner to the outer surface of which the tubes are soldered or fixed thermally, I guess, and painted over. And, anyhow, it is a very close metal-to-metal contact.

And now we come to another point of disagreement. [37]

Mr. Byron: Of disagreement?

Mr. Cuningham: Disagreement, d-i-s. And, in fact, this is a mere quibble, an effort to confuse this issue. It is with regard to a differential of insulation in the refrigerator. Potter teaches less insulation around the cooling compartment and more insulation around the freezing compartment. Mr. Bohman, the chief engineer—present chief engineer for Admiral, was asked the direct question, "Mr. Bohman, does the insulation of the cooling compartment in that exhibit permit greater heat inflow than does the insulation of the freezing compartment of that exhibit," close quote. You will recall that I was referring to the Admiral refrigerator on the floor. Mr. Bohman answered the question with a question, and the Court asked him if he was

in a position to answer that question Yes or No. The question was then repeated as follows: "Does the insulation of the cooling compartment in Plaintiff's Exhibit N, the Admiral refrigerator, permit greater heat inflow than does the"—the witness again answered the question with a question. The Court then suggested—I think you will all recall it. It happened a few days ago.

I am getting a little short of time and I think I will skip this section.

Suffice it to say that this morning——

Mr. Byron: Read it. [38]

Mr. Cuningham: Do you want it read?

Mr. Byron: Yes.

Mr. Cuningham: Give me some more time if I read it.

Suffice it to say that this morning I heard Mr. Parker come back and tell us all about it on the witness stand and testify flatly—and there is nothing to contradict him—that there is proportional insulation in the Admiral box just as he testified earlier that he was sure there was in the Amana box and that that infringes Claims 3 and 4, which, of course, is all relative, differential or proportional, whatever you want to call it, but it has thicker insulation around the freezer than around the cooling compartment, and I do not want to try Mr. Bohman here.

Now we come to another play on words. The defendants claim that because of the secondary system in the Admiral or in the cooling compartment there is no "single liquefying unit" as specified in the

claims of the Potter patent. We ask you as reasonable ladies and gentlemen to consider the fallacy of this quibble, and to consider the fact that the words "single liquefying unit" are lifted out of context in their charts and diagrams. The phrase must be read in its entirety when construing a claim, and the phrase is "a single liquefying unit associated with said expanders and constructed and arranged to condense refrigerant expanded by heat extracted from both said compartments." That is the element. It is [39] not just the single liquefying unit. That is a much more intelligible description of what we are talking about. It is just a matter of plain English. You have heard the testimony of Mr. Parker, supported by the manuals, Exhibits 4-CC-1 to 4-CC-6, that no heat could be extracted from the compartments without the operation of the motor compressor condenser unit in the bottom of the Admiral refrigerator. The cooling compartment liner with its secondary system may be a very efficient, effective, and undoubtedly patentable system—and it is an addition, you do not have to bother much about it—that equalizes the cooling effects throughout the walls of the liner, but that is not in this case, and it cannot operate by itself. If it were placed in an insulated compartment without any electrical plug-in means, or any means of getting the heat, pumping the heat out of the cooling compartment, the insulated compartment, it simply would not make sense; it would not work. This all sounds quite obvious to me, and I wonder

why I talk about it. When it is placed in good thermal contact with the primary plate, as it always is and always must be, heat flows from the cooling compartment through the secondary system, through the secondary system contact plate, and the primary contact plate, into the refrigerant in the primary system and then is pumped out of the refrigerator by means of the liquefying unit in the bottom of the cabinet. There is absolutely no shadow of [40] doubt that there is a single liquefying unit in the bottom of the Admiral and Amana refrigerators which condenses refrigerant expanded by heat extracted from both compartments.

Now we come to the final point of disagreement and one upon which you may base your evaluation of Mr. Muffly's testimony. He has testified that he finds no humid atmosphere in the Admiral refrigerator—I had better read that again. He has testified that he finds no humid atmosphere in the Admiral refrigerator, and I refer you now particularly to Defendants' Chart 114-O which is the printed chart entitled, "Comparison Between Claim 1, Accused Refrigerators and Prior Anderson Cabinet." Go down that chart to the line marked with a numeral 5, but I think this is pretty detailed, and Mr. Parker has testified this morning and never marked these charts up with circles; but just to show where he disagrees from the opinions stated on the chart, and when you see a circle you know there is a disagreement, and you can think about it and make up your minds without a lot of people telling you about it.

Well, I cannot resist the fact that they certainly do a lot of advertising, and they certainly put a lot of labels on their refrigerators, and in their service manuals a lot of directions if they don't have a humid cold atmosphere in them. I do not think you can say much more than that. [41]

Have I talked an hour and a half, your Honor?

The Court: No, you have not. You have talked an hour and twenty-two minutes.

Mr. Cuningham: Well, I think I will come to a subject that we have not had much testifying about or much talk about. That is the question of damages which will, of course, as the Court will tell you when he gives you his instructions, for you to determine. You will recall that Mr. Parker was asked a hypothetical question last week, I believe, as to his opinion of the value of a reasonable royalty for the manufacture and the sale of refrigerators like those of the two defendants here. His opinion was given as 10 per cent of the amount received by each defendant for each refrigerator complained of in this case. The evidence shows that 164,173 Dual-Temp refrigerators had been sold during the life, five years life, of the reissue patent and that the Admiral Corporation has received for such refrigerators a total of $41,864,360.87. That is all in Exhibit 4-CC, the Answers to Interrogatories. There is no dispute about these figures. They are admitted figures, and that the Amana Company has during the same period—that is the five-year life of the reissue patent—made and sold 4,232 accused refrigerators of the models specified, FR-9

and FR-9-S, and has received for such refrigerators a total of $1,012,567.80. That is in the Amana Answer to Interrogatories No. 4-DD, which will be available to you. [42]

So just to sum the whole picture up, that is the verdict we ask you to bring in, 10 per cent of these dollar receipt figures. That would be $4,186,436 royalties from Admiral and $101,256 royalties from Amana, totaling $4,287,692. Do not let this amount stagger you. It is only about six per cent of the retail sales price of these refrigerators to the public, what the man on the street pays. Remember that this is the climax of a 25-year struggle—27-year struggle, or 25, to enforce this patent which has few, if any, equals in the patent history of the United States. Over one million dollars has been invested in this effort over that period of years, and many, many people have contributed to the effort.

Admiral licenses, they have a license that was referred to in the hypothetical question, a license, a rubber gasket on the outside of their door—it is shown on the exhibit here as a little tube—at 2½ per cent for a gasket gadget patent compared to the type of invention you have here in this suit; not just a new model but a new idea in household refrigeration, so do not hesitate to bring in these two verdicts if you feel satisfied on the evidence in this case that the plaintiffs are entitled to that amount as just compensation for the infringement suffered at the hands of both of these defendants.

Thank you for your very courteous attention [43]

which you have given to our troubles here. It has been indeed a pleasure to work before you.

The Court: Ladies and Gentlemen of the jury, we will take a ten-minute recess.

(Recess taken.) [44]

The Court: Mr. Ramsey.

Mr. Ramsey: May it please the Court, Ladies and Gentlemen:

It has been some little time since we started, and you may have forgotten somewhat the statements made in our opening argument. At that time I said I did not know exactly what the plaintiff was claiming, what the issues were, what they were talking about, and, frankly, I am advised a little bit more, but still the issues are not clear as I see it. I think the easiest way to start out is on ground that both sides have in common.

The defendants contend that the Anderson patent is the closest one, and that is because the Anderson patent is held by, or was owned by, the predecessors of these plaintiffs, of Potter, and was put on the box, and it is on the Potter refrigerator, the one over there to the left, and they operated under it from the time Mr. Potter bought it in 1931 until it expired in 1939. It is agreed also that the only difference between Anderson and this patent in suit is something having to do with finned coils. They see, or contend they see, in Figure 2 in a side elevation a square, and they say that is a finned coil and that makes it different from Anderson. We do not see it,

and I think all the argument in the world through experts' eyes, through lawyers' mouths, won't change a thing. You can look at it, and you can consider [45] it, and you are mature people.

This is a fact, and you can also bear in mind that the patent is entirely silent on it. There is no word in there about a finned coil, and this case rises and falls on that. In other words, they say, "We improved Anderson in effect by adding some fins to Anderson's coils." Why? They said because if you put fins on it it does not frost, but you remember the last thing Mr. Parker said. We were very surprised. They asked him whether he looked at it and saw any frost on it on a coil in the Potter refrigerator, and he said, "Yes, there is some ice on the pipe on the first two or three fins." Well, that is exactly our position. And, also, he says there is no such thing as a non-frosting coil, it will frost if you put a certain amount of refrigerant in it, and it will not frost if you put another amount.

This claim I like to think, at least, is something like a description in metes and bounds of a piece of property. I think I used that analogy in opening. An infringement is something like trespass on land of someone's personal property, and it is necessary to define this measurement. You have to have your fence-line around it to advise the people where your land begins and where it ends, and that is the point, and that is required of a patentee. He has to claim it clearly and distinctly, not vaguely, not so that the fence-lines can be shifted around or they can be altered one way or another as suits their will. You

will remember, and I know that there is nothing more boring than hearing lawyers drone over instruments, what is a file wrapper and what do they say, but I know you paid very careful attention and you have paid careful attention to it. I will summarize, and I think you probably have heard those various references that were showed, and if you have any doubt they will be in the jury room with you so that you can see them, and the file wrappers will be there, and you can see what was said with regard to these claims. In other words, you have to be consistent. They mean exactly the same thing when you ask for them as they do when they try to say, "My fence-line is over here someplace." In other words, you get paid for something by teaching something, and you do not get paid for anything more than you teach.

What did they teach? They said they taught a finned coil. Whether they did or not, and let us assume that they did, and it is easier to say that they did, but the next question is, so what? Did you invent something? Well, they said that produces a non-frosting condition. Their own expert says it does not. I say it did not. There is no such thing as non-frosting, but you will possibly remember of them reading the depositions, and it is hard to pick things out of them, but the mechanic that originally devised this, Mr. Bade, said, "We put in enough refrigerant so that the frost line runs about halfway up so that one part frosts and the other part does not." We think that that is absolutely

true. You would not remember the incident, probably, when Mr. Potter was giving his deposition, but he began to laud a certain author, a fellow by the name of Hall, and he said, "Now, Mr. Hall recognized my works. He is one of the best-known men," and he read a little squibble, but he said, "I want to make a little change. Mr. Hall says that my invention is a frost-defrost cycle. Actually, it is a non-frost." Well, there is a great deal of difference, and I do not know whether you got the difference. In other words, a refrigerator works on a cycle, and it is just like in your house, when you turn on your heat and your thermostat comes on it comes on to a certain temperature, then drops down and comes on again. In other words, if you had it right on the dot it would be running all the time or going on and off all the time. So this frost-defrost, they have it cold enough to produce some ice, and it raises up and melts off and comes on and them comes on again, and that is called a frost-defrost.

Now, when Mr. Potter and Mr. Bronaugh in this patent in suit asked for a reissue they said, "This patent is different and this is not for the mere result but this is different, and we will define it very carefully, and this [48] does not mean one of a frost-defrost type. This means non-frosting." And here at the very end his own expert says it must be frost-defrost—certainly.

As far as these defendants' machines are concerned, they have knobs on them, and you do not have to be an expert to know how to run a refrig-

erator. I think most people are familiar with refrigerators and know they have knobs on them, and you can run them as cold or as warm as you want. I think the same thing is true of Moist Cold or any other type of refrigerator. There are knobs on these refrigerators as was shown to you when Mr. Muffly was here, and you can set them up normally where they are nicely in balance, not too much frost, maybe none, and maybe if you get them on the button they might not frost at all. If you get them a little colder, there will be frost then on the up-cycle; there will be frost. If you turn clear down to the bottom, they will frost and accumulate frost, and that usually is not a good condition. In other words, that is a situation that usually you want to avoid; but if you have a lot of things you are going to put into the refrigerator and it is going to be warm you are going to have a little frost and will have to make it go longer to bring it down, and it is adjusted to meet the situation, and many manufacturers provide it.

So the first thing: Is it non-frosting or is it frost-defrost? If it is frost-defrost, we have no lawsuit, for plaintiff explicitly said to the Patent Office, "We disclaim that. That is not infringed. These claims that are secured to us, every single claim, to 4, all had that same limitation in them." Also, another thing, they also have to have some kind of a finned coil because that is their only contribution. That is what they paid or say they paid for this patent; They bought a finned coil in a certain organization.

Of course, it was reorganized, and it is the Anderson organization, but whether they did or whether they did not it is for you folks to say. Possibly you remember.

As I said when we started, there was going to be a lot of complications; there will be a lot of things, a lot of technical things that sound difficult, but always in every case it develops to simple things such, for example, as the claims that that coil has to be within a compartment. We have experts and lawyers and everything—you know what it says; you know what a compartment is, and you can see the picture, and you can see what the number is, and you know. You either think it is inside the liner or outside the liner. You know what a compartment is. A compartment is a bounded space, and in this Potter-Bronaugh it shows—I do not have it here, but you will see it has a metal liner around it. In the Admiral and in the Gibson, which is a cold-wall type, and it is conceded they are different types, it is not in the space at all; it is around the back of it. They have not discussed why they want to have blank walls—that is, unobstructed walls—in the inside of the cooling compartment. You housewives particularly would know that a blank, bare surface, you can keep it cleaner, and you want things kept clean, and I suppose that that is why the housewife and the refrigerator owner wants them. At least, the manufacturer tries to supply what people want.

Just very, very briefly, you have to state an improvement in something. It has to spring from

something. It has to have some base of what we call prior art in our particular jargon, and that is the state of the art that exists when a person enters it. Now, you will remember that, and we are very fortunate to have Glenn Muffly here, one of the pioneers in the refrigeration art, and he testified to what the art looked like in 1925 when he came into it and said that there were cabinets, double cases, two temperatures, two humidities, and then named the manufacturers and said they were old and well-known in that art, and he was impressed by that and thought that probably the public would like to have that kind of a refrigerator and was working for one of the early refrigerator manufacturers, and so he built three or four of them, but the market was not ready for that, and even the plaintiff's witnesses, the G.E. men, you will remember their testimony said "We didn't do it because the [51] public would not buy it, too expensive, so we have had to build refrigerators that are within the public pocketbook." And, as counsel for plaintiff has reminded you, there were some pretty lean days in the '30's, and there were not very many mechanical refrigerators in those days. The buying public is the one to be served. You can't say that you ought to buy a lot of expensive things if we do not have the money to do it, and, seemingly, the people that employed Mr. Muffly said, "Let's get the price down first." The war came along, and I suppose the buying public is used to spending more money for refrigerators, and maybe that is the reason that they

liked this type of refrigerator and like the refrigerators generally. I am kind of off the track, but I mean that is just the picture. [52]

Now, concerning the Patent Office, the Examiner, for some reason, didn't find that Larkin patent and it wasn't cited against the application here. And there is no question about it. He testified we weren't there but they said—Potter and Bronaugh said what we did was to buy a Larkin patent and put it in the box and we bought it for its purposes, put it in the box and put it that way. So we bring in the Larkin patent which teaches all that.

Now, that certainly couldn't be an invention or he couldn't be paid twice. They take a Larkin coil and use it where it was intended to be put in. But the Examiner didn't find it. Then, also, during that time there was before the Patent Office the Gibson patent which is the one under which these defendants have bought and paid for and operated their license from Frigidaire.

You remember the testimony of Mr. Morton, the Chief Engineer of Admiral, and he said that when we started in 1944, 1945, steel was in short supply and we couldn't supply civilian goods and I was trying to build a two-temperature refrigerator and I worked up the best design I could, and after it had—we say "jell" if the design is complete—we had a thorough search made of all patent records. We tried to find out whether we were going to cross anybody's fence line. So people advised us that we might be in that man's property and this man's property and that man's [53] property, so we

took a license and paid licenses to everybody that we thought might be involved. And the licenses were granted to them.

Now, one of these licenses, I say, was one to Gibson, and that is the one under which they operate. I think that patent has expired. Yes. That has expired. But during the life of the patent they did pay rent for it, the agreed rent. That was in the Patent Office before Potter was. And, naturally, the Patent Office can't grant a monopoly to two different people for one idea, and so if they think that anything is close they declare what is called an interference. Well, that is just a contest between two people to see which is earlier.

But, before they can have such a contest, they have to be asking for about the same thing, and it is very persuasive. Now the cold-wall type of refrigerator is a different type than a coil in the compartment, and the Patent Office didn't declare interference. There was no contest in there.

You can either spell it one of two ways: Either the Patent Office made a mistake or there was no conflict in fact. I think I am inclined to think the latter, and that is particularly true because later in 1936 on this second patent of Potter he put in an application and he was arguing himself about the difference between finned coils and cold [54] wall, and he was arguing about whether his coil is within the compartment or outside of it and he was then met with the Gibson patent. He says, "Well, obviously it isn't. Obviously around Gibson's, which is a cold wall, the expander is on the outside of it."

The Court will probably instruct you as to the meaning of "patent" and "patent claims" and will instruct you that they have to give reasonable intendment to the language of a document. That isn't peculiar to patents. That is true of any contract or of any agreement. And no one forces a man to write certain things into his claim. He does it voluntarily and he is, what we say in law, the scrivener of it. He is bound by what he writes. It is up to him to particularly point out and he does it, and the Examiner says "No" or "Yes," or sometimes by agreement he says, "Well, if you will change this a little bit, I will change that and I will agree to it."

Now, all we have to go on here in this case is a definition of what the plans are. I imagine this must be awfully boring, this question of inside and outside, and I am going to just be very brief and I am not going to make a speech and I am not going to approach anywhere near to it and bore you. Referring to Mr. Muffly—and we will go back to the first one, what we are talking about—we have all agreed Claim 2 is a broad claim and if—that is the one that is controlling, underlying all of the other three claims. This No. 5 that you have heard so much about, this cooling refrigerant expander having heat-conducting surfaces within said cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32° F. while withdrawing heat from the compartment whereby air in the cooling compartment is cooled thereby to a temperature of above 32° F. and is maintained at a humidity whose relative

value is at least 100 per cent at 32° is just a finned coil. I mean that is supposed to define it. But Mr. Parker says that the only thing that can mean in Potter is a finned coil.

Now, the important words in there are this word "within," and, as I say, you have to make up your own mind, is it within that compartment 14 that Potter says and argues for? Later, you remember, in his second case he is talking about "within." We will leave that one. I think that has been beaten to death, but it is important.

The next one is—I must preface this just a little bit. A patent element has to be defined in terms of structure. You remember that you have been hearing structure, functional result. He can't do it by function, you can't do it by results; you have to do it by structure, particularly if it is a point that we call the sole point of novelty or a point of novelty. Now, it says "constructed"—"that is constructed and arranged to maintain its heat-conducting surface above 32° F.," an element maintained always above. And that is the definition he put on it when he was asking for it particularly in the reissue. So I suppose it goes without saying that if it gets to 32 or below it isn't maintained there and he doesn't —Parker said—the last thing it frosts. We say ours frosts. You can change it around but even one of the models which he has in the manual, that is the way it is designed, frosts on normal operation. Some of them may like to have it nicely bald, and you remember the manual says that it is kind of hard to do at the factory. You have to vary it for

altitude and load and all that sort of thing. That is a question, that "maintain." It has some inherent thing in the cooling coil, some inherent thing that prevents it from going under 32°. Both sides say no, it hasn't anything like that. So, Mr. Muffly says, "No. No; that is a function of the thermostat." You set the thermostat. If you want it a little colder, you set it down; if you want it a little warmer, you set it up. But you don't change the cooling coil any. That just stays there. As a matter of fact, you can take a cooling coil and you could make a—probably you could make a steam pipe out of it or you could make any kind of a pipe out of it. You could put it down in the freezing compartment. That is just an inanimate tube. There is nothing about that that is constructed and arranged unless there is something mysterious about a finned coil or something. So, but, the maintenance has nothing to do with it because they said a "finned coil" cannot be maintained. They say it is just the way you operate it.

Now, you get on 6 which we don't put any great stress on. That is the cooling compartment. They say that is a function of the thermostat, too; that it will freeze if you turn enough refrigerant in and it will not freeze if you don't. It is almost that simple. So we say, "Well, we don't have any function of maintaining an arrangement constructed." You could run it so it wouldn't frost. You could freeze it or take it to zero or 10 or 20 above or below; it makes no difference as far as the coil is concerned.

Now, this 8, 9 and 10 are something that you will remember. Maybe you will remember. As I say, it is dull. While they are wriggling around trying to get claims in and they are met first by Anderson, and Anderson says—and the Examiner says about Anderson, "Why, he has got everything that you have shown." And then he says, "No. He doesn't have a non-frosting coil." Well, he does. Why doesn't he? Well, because he has to put some liquid refrigerant in it. It won't get cold enough. But they didn't tell the Examiner at that point that they do, too. But they left that impression with the Examiner that they didn't. They didn't say [58] truthfully, "We don't." But, he says, "Why, ours is different from theirs because they have to put liquid in it." But they are all agreed that so do they. And you can't do it without putting part of that refrigerant in in liquid.

Then they got by that hurdle. Then, the next ones they got by or were faced with were the ones—the Davenport ones where the refrigerant is partly a volatile refrigerant and partly is air, and that provided one of these combinations that showed in these combination freezers-refrigerators, controls for both, and they said, "Well, a moist cold climate, humid climate," and everything. "Look! That fellow shows it, too. How did you differentiate with his?" "Well, we use only volatile refrigerant, and that is much simpler." So that is the meaning of this word "sole."

And then they got over to this group of Lundgaard, Curtis and Barnes, and they—we have only

asked you to consider the Lundgaard one. He says, "But, look! They have got a non-frosting moist cold climate in that combination. They have got a freezer and a refrigerator and a non-frost moist cold just like you have." "Well, yes, they have, but they use—they have a cold plate down in the refrigerator half, and they blow air over that and they have to use this draft of air which goes up and down this stack and at 34° Fahrenheit."

So, it is true they have got a non-frost, but they do it differently, and we have only one that runs between 1 and [59] 2. They obtained those claims and those representations with those differentiating qualities. But we don't use them, and they may be all right.

I don't know anybody that does use them, but as far as people that I represent they feel that they have to have a primary, secondary; they have to have a cold wall with all of its advantages, and so they do. So, as far as infringement is concerned there isn't any. As far as validity is concerned we don't think the man invented anything. He didn't disclose anything new. He didn't do a thing over his own patent that he bought from Anderson and operated under for a long while.

Now, the reason I say that is that when they started out you will remember those claims. He thought that they invented a combination freezer and refrigerator and put in claims for it. The Examiner immediately said, "No. That is old." So, then, they asked him for reconsideration. "No.

There is another one." Then we later found out there are some 20-odd of that type. That is on the back of a patent, the reissue patent, and you will have that with you. Look at them. Look at any of them, if you want to, if you have any questions. I think, however, that you do understand.

Then, when those claims were rejected and the man's attorney said to them, "I don't think we have got anything," he got discharged for that and for another reason [60] that appears in the record.

Now, that is the reason, I think, that when they started out they didn't have this thing in mind at all. It isn't reflected into the specifications or reflected by the claims.

The first claim that ever was put in was 1932, and this was filed in January or February of 1931. So I think this is something they couldn't get what they wanted, so now they are trying to find out something that they can wangle out of the rest. It is for that reason—and you possibly have forgotten—it is for that reason I said to you at the start they took one position to get a patent and it is a very narrow patent and of doubtful validity. We don't think it is valid at all, but it is very narrow.

Then, they get it and they try to say it is very broad. Then, they have got to go back in again, say it is very narrow. They say these little things don't cover this and don't cover this, and now they are out again, and it is of world-shaking importance. You can't do it. You have got to be consistent.

Whatever they have, if it is valid, more power to them. If it isn't valid, an invalid patent should be taken off the books and shouldn't be put out as hurdles against anybody. But, as far as we are concerned, we don't use it. We use an entirely different system. We entered the field—both factories entered the field, looked through the patents, [61] paid their interests to people, paid a license fee, asked for them, got them, and are operating on them, and it is this one and it is agreed that this is the same. That is the one that we are operating on and not the Potter; nothing close to it. By their own claims we are not close to it. That is our position. [62]

Plaintiff's Rebuttal Argument

Mr. Cuningham: Mr. Ramsey, as I understood him, sort of hung his hat on the theory that the defendant had gone down one road, the cold-wall road, and at that time the Potter patent had gone another road, the finned-coil road. That is what I think he tried to say. And he said, therefore, no infringement existed. He says, well, maybe it is valid, but it is pretty narrow and ought to be limited to that finned-coil road. That is what I got out of his talk.

Well, you may wonder why we failed to cross-examine the only witness that took the stand for the defendant. We did, really. The reason was that our theories completely missed. Mr. Muffly did, as we understood it, meet the position we have maintained in this court for two or three weeks on infringement. In fact, he did even better for us than

we expected. He said on the record—and I will quote him from the transcript, Page 1303—I quote Mr. Muffly:

"You can do anything with the sheetmetal evaporators like Davenport that you can do with a coil."

Those are his very words.

Now, of course, Potter isn't limited, we all know that. That is just a finned coil. The testimony is that he could have used a brine tank. In fact, the testimony is, from Mr. Bronaugh, as I recall it, that they did try out a brine tank in the cooling compartment and later settled on the finned coil as the cheaper and handier and easier thing to get. But the whole point is it is an extended surface and anyone knows the relationship between the surface temperature of a large area and a smaller area. There is that difference, you see, and Mr. Muffly was not mentioning a very deep fact but certainly an obvious one, that you can do anything with a sheetmetal evaporator that you can with a coil.

Mr. Muffly even did better than that. Transcript Page 1277: He pointed out that—well, you remember that Mr. Byron and I had a little tiff about the little finned coil showing in the patent whether it was in Figure 1 or Figure 2, and so on. Mr. Muffly said in the record at Page 1277:

"This coil leads into a rectangle which might be a brine tank."

and it might. We don't think it is. We think it is a diagrammatic showing of an extended surface coil; that is all there is to it. Of course, a sheetmetal expander or Mr. Gibson's aligner on these things here

(indicating), they are all expanded surface coils working from a little round expander-evaporator, whatever you want to call it. So we knew, of course, that that was the distinction that was [64] attempted here. There seemed to be no reason to examine Mr. Muffly on that and, of course, the fact that there is no word about a finned coil and the limitation about a finned coil expressly in the patent is true. It would have been an improper definition of the invention to limit it to a finned coil.

These are all, in a sense, finned coils, expanded surfaces, and they work in the same way so that your heat-transfer surfaces don't have to get below 32 degrees where they touch the air that comes out of the food and dehydrate it. That is one of the reasons.

Now, there may be some confusion in your minds—it would be natural, I think, if there were—as to why Potter bought the Anderson patent in 1922—why he bought it in '31. Well, it shows and claims the series expanders from the one liquefying unit. It doesn't claim anything about finned coils or disclose them or teach them and it lay fallow for, oh, ten or eleven years before Potter discovered it in a patent search in connection with his own application and felt that here was a man who taught something that he was using. It wasn't something he invented, but that patent was unexpired in '31. It didn't expire until '39, and it had eight more years of life. Well, being a pretty straight-forward fellow, he bought and paid for the patent because he

felt that he had to use it in order to use his invention. Now, the Judge has told you that a patent is the right to exclude others from using your idea and not the right to use your idea yourself. It is just what made Potter buy the Anderson patent. There may be a prior patent that prevents you using your own idea, but the prior patentee can't use your idea. Anderson couldn't have used Potter's invention had he wanted to, even though Anderson was prior, because they weren't one and the same thing. In fact, Anderson made not even any attempt at humidity control. He didn't try to solve the problem. Of course, he didn't do it. But, nevertheless, Potter, who did solve this problem of dehydration and the other problems needed to use the unexpired Anderson patent. That is the way our patent system works, and if you think about it it couldn't work any other way. You would be all mixed up if it did. It is a limited monopoly to exclude others from using your idea. It isn't a limited monopoly to you yourself to use your idea if in doing so you conflict with somebody else.

Mr. Potter being a pretty straightforward businessman decided that he would pay for this Anderson patent because he had to use it for eight years remaining of its life when he wanted to bring out his. He didn't want to fight about it. He was pretty naive, I guess, in this vale of tears when you look at his experience and what he did for his headstart in the business. Why other people don't realize the work and the labor and the property and the value to the [66] public of patents like Mr. Potter did

when he bought the Anderson patent, I frequently wonder. And these defendants have made the figures I have quoted to you utilizing this invention. The defense in this case of non-infringement is ridiculous. Thank you.

The Court: We have finished sooner than we anticipated, but I am not going to instruct you tonight. I am going to instruct you tomorrow morning, because if I instructed you tonight, in the first place I couldn't do it, in the second place I want you to listen carefully to me and what I have to say because I have got the final say. Even if you didn't understand some of the things that these attorneys have told you, I am going to put it in simple language for you and tell you exactly what you have to decide and the issues you are going to have to be concerned with and what the law is. I am going to try to make it as explicit and clear as is possible.

Juror No. 2: Your Honor, is that the time when we are going to be permitted to make notes?

The Court: Yes, if you want to. I will tell you, though, I don't think you are going to have to make notes. I should have told you that you could make notes during this argument, but I forgot about it. It may very well be that I will have a transcript run off of my remarks and then if you get into any difficulty we will let you see what I did say. That might [67] help you. I will tell you now that you haven't heard one of the most important parts of the case and that is coming tomorrow, so please

don't make up your minds as to how the case should be decided until after you have heard the instructions.

You are now excused until 9:30 tomorrow morning.

(Whereupon the jury was excused.)

The Court: I want to announce now that all persons who have been subpoenaed here on behalf of either side are now excused from further attendance at the trial if there are any such persons. Secondly, I want to say that tomorrow I will begin to instruct about 9:30 in the morning. Under the rules that we have here no one leaves or enters the room during the giving of the instructions, so unless you are here at 9:30 you are not going to get in. Counsel, of course, would have a right to come in, and we will wait for them. I work on these instructions, I prepare them, and I don't want any distractions; and, therefore, if you want to come here, you are perfectly welcome to come, but we don't want any moving around. Just sit in your seat and stay there. There will be only one movement, and that is at the end of one hour there will be a change of reporters; that is the only change, and that is the only break that there is going to be. Then as soon as the reporter comes in we will stop and the new reporter will take his place, and then we will start in again. But I don't want any interruptions other than that. I am going to continue to work with Mr. Kolisch

and Mr. Cheatham on the interrogatories and some of the final instructions. The instructions will take approximately two hours.

Recess until tomorrow morning at 9:30.

(Whereupon proceedings herein were adjourned to December 1, 1955, at 9:30 a.m.)

United States District Court
District of Oregon

Civil No. 6016

MOIST COLD REFRIGERATOR CO., INC., an Oregon Corporation,

Plaintiff,

vs.

LOU JOHNSON CO., INC., an Oregon Corporation, and MEIER & FRANK COMPANY, INC., an Oregon Corporation,

Defendants.

and

ADMIRAL CORPORATION, a Delaware Corporation, and AMANA REFRIGERATION, INC., an Iowa Corporation,

Defendants-Interveners.

COURT'S INSTRUCTIONS TO THE JURY

The Court: Ladies and gentlemen of the jury: At the commencement of this trial and at various times throughout the trial, I urged you to listen carefully to the evidence introduced by the respective parties and not to make up your minds as to how this case should be decided until you heard all the evidence, the arguments of counsel, and the instructions of the Court.

In spite of the length of this trial and the numerous recesses, you have shown a great deal of patience and have paid careful attention to the testimony of the witnesses and the arguments of counsel. At this time, I desire to express to you my sincere appreciation for the way in which you have performed your duties. It is now my privilege and my duty to instruct you as to the law which governs this case, and I hope that you will pay as close attention to my instructions as you have to the evidence and the arguments of counsel.

This case presents a number of issues, and it is the duty of the Court to instruct you fully on each of such issues. Some of them may be covered by only one instruction while others may require several instructions. You must not allow yourself to be influenced as to any question or issue by the number of instructions given you upon such question or issue. The Court does not intend to stress the relative importance of any question of fact or law either by the [1484] number of instructions given you upon a particular proposition or by the order in which the instructions are given.

It is your duty as jurors to follow the law as stated in these instructions and to apply the law so given to the facts before you. You are not to single out one instruction alone as stating the law, but you must consider the instructions as a whole. Regardless of any opinion you might have as to what the law ought to be, it would be a violation of your duty to base a verdict upon any other view of the law than that set forth in my instructions.

You have heard the arguments of the attorneys. As they themselves have told you, what an attorney says, either during the course of a trial or in his argument to you or to me is not evidence. The attorney is not under oath and his duty is a partisan one to his client. The purpose of an argument to a jury is to suggest inferences and deductions which the particular attorney believes can be drawn from the evidence. While you may follow the inferences and deductions that are made to you by a particular attorney, if they seem reasonable and logical to you, you are not bound to do so.

It is the duty of the Court to admonish an attorney who, out of zeal for his cause, does something which is not in keeping with the rules of evidence or procedure. Do not draw any inference against the side to whom an admonition of the Court may have been addressed during the trial of this case. In order to determine the issues and the interrogatories that will be propounded to you, it is immaterial whether you like or dislike one or more of the attorneys who have appeared in this case or

the manner in which they or any of them presented evidence or argued the facts to you or to the Court.

You are the sole and exclusive judges of the facts in the case and you are bound only by the testimony and the other evidence which is before you. You are to decide the questions that are to be propounded to you solely upon the basis of the evidence that has been introduced at this trial, that is, the testimony and exhibits which have been admitted in evidence, without any feeling of sympathy, bias or prejudice for or against either the plaintiff or the defendant. If you have acquired, or believe you have acquired, any knowledge or information concerning any issue involved in this case from any source, other than the evidence, you are not to convey such information to any other juror and you are not to consider it yourself.

In the trial of a case, the function of the judge, or as we say, "the Court," is different from that of the jury. It is the function of the Court to lay down the rules of law that govern in the trial and preside therein and to see that the trial is free from error. The Court must necessarily rule on questions of law throughout the case. These rulings on questions of law have, so far as you are concerned, no relation to the questions of fact. It is your duty to ignore any evidence that is ruled out and, when a witness is not permitted to answer a question propounded by an attorney because of an objection interposed by an attorney for the other side, you are not to speculate on what might have been

proved if the ruling had been otherwise and the witness had been permitted to testify.

A judge of the Federal Court has the power to sum up the evidence and to suggest conclusions thereon, that is, he has the right to comment upon the facts of the case and he may also comment on the credibility of witnesses. In this case, because of the long recesses, numerous depositions, and the highly technical character of some of the evidence, I shall avail myself of that privilege primarily for the purpose of clarifying the issues.

Ladies and gentlemen, I shall not comment on the evidence in this case. I have that privilege, but I am not going to do it because, under the law, you are the sole and exclusive judges of the facts. I think the case has been fully and fairly tried, and I am going to leave the questions of the credibility of witnesses and the facts solely up to you.

Insofar as I lay down for you rules of law, you are required to follow them because it is the exclusive [1487] province of a judge to instruct you as to the law that is applicable to the case, and it would be a violation of your sworn duty to base a verdict upon any other view of the law than that given in my instructions.

I have stated that I do not propose to comment on the evidence. Therefore, if any of you know what my attitude is towards the questions of fact that will be submitted to you, you may disregard my opinion for, as I have stated, under the law you are the sole and exclusive judges of the facts and the credibility of all witnesses.

During the course of the trial, I occasionally asked questions of a witness in order to bring out facts not then fully covered in the testimony. Do not assume that I hold any opinion on the matters to which my questions related.

In a civil case such as this, the burden of proving an allegation by a preponderance of the evidence is laid upon the party making the claim. In this case the plaintiff has the burden of proving certain issues and the defendant has the burden of proving certain other issues and from time to time, in the discussion of the issues involved in this case, I will tell you upon whom the burden of proof rests.

Preponderance of the evidence does not mean the greater number of witnesses but the greater weight and the convincing character of the evidence that is introduced. In other words, you are not bound to decide in conformity with the declarations of any number of witnesses which do not produce conviction in your mind, as against the lesser number or against a presumption of law or evidence which satisfies your mind. The direct testimony of any witness to whom you give full credit and belief is sufficient to establish any issue in the case. Every witness is presumed to speak the truth. This presumption, however, may be overcome by the manner in which he testifies, the character of his testimony, or by evidence affecting his character or motives or by contradictory evidence. If you find that a witness has testified falsely in any one material part of his testimony, you should look with distrust upon the other evidence given by such witness and

if you find that any witness has wilfully testified falsely, it will be your duty to disregard entirely all evidence given by such witness unless it is corroborated by other evidence which you do believe. The testimony of a witness is said to be corroborated when it is shown to correspond with the testimony of some other witness or comport with facts otherwise known or established by the evidence.

The rules of evidence ordinarily do not permit a witness to testify as to his opinions or conclusions. An exception to this rule exists in the case of an expert witness. A witness who, by education, study and experience, has become an expert in any art, science or profession, may state his opinion in a matter in which he is versed and which is material to the case and he may also state the reasons for such opinion. You should consider each expert opinion received in evidence in this case and give it such weight as you think it deserves. Such opinion will be judged upon the same basis as you would judge the opinions of lay persons who have testified, except that you are entitled to give it more weight if you decide that, because of the experience and training of the expert, his opinion is more likely to be accurate than that of an untrained person. You may reject the opinion of an expert witness entirely if you think the reasons given in support of it are unsound.

I shall now outline the contentions of the parties.

Plaintiff, Moist Cold Refrigerator Company, alleges that prior to the commencement of this action,

all of the rights of the patentees in the original and the reissue Bronaugh and Potter patents were assigned to it, and that it is the sole owner of all patent rights involved in this litigation.

As such owner, plaintiff filed this action for patent infringement against Lou Johnson Company, a wholesale distributor of Admiral and Amana refrigerators, and against Meier & Frank Company, a retail distributor of these two refrigerators. Shortly after the commencement of this action, [1490] both the Admiral Corporation and Amana Refrigeration Company voluntarily became parties to this action and are defending the case. Therefore, any judgment that may be rendered in this case will be for or against them. Neither the Lou Johnson Company nor Meier & Frank has any interest in this case.

The Admiral Company and Amana Company, in their answers, denied the allegations that the Moist Cold Refrigerator Company was the sole owner of all the patent rights involved in this litigation. This then will be your first inquiry. You will recall the testimony of Mr. Potter with reference to the various corporations that at one time or another have had interests in these patents, and you will also recall his testimony concerning the number of people who are making monthly payments to Mr. Potter in connection with this litigation, and who Mr. Potter contends have no interest in the plaintiff corporation or in the reissue patent in suit.

On the issue of title, plaintiff has the burden of

proof to establish by a preponderance of the evidence that it owns all of the patent rights involved in this litigation. I leave it to you to determine, as a matter of fact, whether plaintiff has proved this. Of course, if you find that plaintiff has failed to prove it, you will find in favor of the defendants. [1491]

The Admiral Company and the Amana Company contend that the patent in suit, namely, Bronaugh and Potter Reissue Patent No. 23,058, is invalid and void. They further contend that none of their refrigerators infringe the claims of such reissue patent event if the reissue patent is valid.

A patent is a grant by the United States of the right to exclude all others from the manufacture, sale and use of a particular invention for a period of 17 years in exchange for the disclosure of that invention to the public.

The original Bronaugh & Potter Patent, No. 2,056,165, was issued October 6, 1936, to Thomas I. Potter. It covered a combination of known refrigeration elements and principles to create separate refrigeration compartments for foods desired merely to be cooled and those desired to be frozen, and to eliminate the necessity of defrosting. The sole claim was to the combination and not to a single element therein, all of which elements were well known.

As I explained to you at the beginning of the trial, this patent was surrendered because in an action on the original patent, the Court of Appeals for the Seventh Circuit held that the patent was invalid. By reason of such holding, the owners of

the patent went back to the Patent Office, and by making changes in the claims and by surrendering the old patent, secured Reissue Patent No. 23,078 on December 14, 1948, and it is this reissue patent which is [1492] the basis of this action. A reissue patent is identical to an original patent except that it is issued when the original patent was defective or contained certain errors and the Patent Office finds that the defects or errors have been corrected.

Both the original patent and the reissue patent were granted under an Act of Congress which provided for the issue of a patent to any person who has invented or discovered any new and useful art or machine or any new and useful improvements thereof not known or used by others in this country before his invention or discovery thereof, and not in public use or sale or not patented or described in any printed publication before his invention or discovery for more than two years prior to his application. This is the basic law governing the granting of patents, and I shall now take up the pertinent provisions of this law in relation to the contentions of the parties and the evidence adduced at the trial in support of such contentions.

In order to obtain a patent, a person must show, first, that he invented or discovered a new and useful machine or a new and useful improvement to such machine. The granting of a patent by the United States Patent Office carries with it the presumption that the patent is valid, and, therefore, when the Patent Office issued the original patent

and likewise when it issued the reissue patent, the patents [1493] themselves are prima facie evidence of both novelty and invention. This is not a conclusive presumption, but merely a rebuttable one, and you will recall that the Court of Appeals, in spite of this presumption, found that the original Bronaugh and Potter patent was invalid. In other words, it is a rule of evidence which casts the burden of proving invalidity upon the defendants by clear and convincing evidence.

The question of whether a patent discloses an invention divides itself into two considerations:

(First) Was the machine anticipated? In other words, was the same thing disclosed in an earlier patent, or had the same thing been publicly known or done? And,

(Second) If this same thing was not patented or described or known before, were there other machines so nearly like the one described in the claims of the patent that it needed no inventive ability to make the machine which the patent claims to describe, but would a person skilled in the art, in this case the art of refrigeration, naturally have made such changes or improvements?

Stated differently, invention is to be distinguished from the workmanship of a good mechanic or engineer skilled in the art of refrigeration. [1494] The exercise of mechanical skill, which does not amount to invention, is embraced in such common expressions as "expected skill of the calling" or

the "skill of the art." With the rapid advance of science and technology, the level of expected skill in many fields is constantly rising. Knowledge of the prior art is not limited to the knowledge of the public generally nor to those carrying on routine work in a complex and technical field, but embraces the knowledge of experts—trained engineers—who were working in the field of refrigeration, at the time of the alleged Potter and Bronaugh [1495] invention.

A person who conceives some machine and applies for a patent thereon is conclusively presumed to know all the same or similar machines which were disclosed in patents and which were publicly known or used by anyone else at a date more than two years prior to the date of his application whether, as a matter of fact, he actually knew of them or not. What was previously patented or described or publicly known is collectively spoken of as "the prior art" or "the prior state of the art."

Such prior patent must disclose the invention in a complete enough form to accomplish the same result accomplished by the claimed invention in substantially the same way. It is not sufficient to constitute an anticipation that the device relied upon might, by modification, be made to accomplish the function performed by the patent in question in the same way if it were not designed or adapted, nor actually used, for the performance of such function.

However, all of the elements or parts of a claim need not be found in a single prior art reference

in order to show lack of patentable invention. It is proper to look to the entire prior art, and the mere fact that some of the elements of a combination claim are found in one prior art patent and other elements are found in a different prior art patent does not render the teaching of either or both of such prior art patents ineffective as a guide for ascertaining novelty. [1496] There still remains the all-important question as to whether the new combination of such old elements amounts to patentable invention or whether it might reasonably be expected of a mechanic or a person skilled in the art.

Each element in an invention need not be new. Patentable invention may exist in combining old elements in a new way so as to produce a new result or an old result in a new or better way. But the fact that the new combination accomplishes a better result does not alone evidence invention. The combination of the selected elements may be an improvement upon anything the art contains, but if in combining them no novel idea is developed, there is no patentable invention, no matter how great the improvement may be.

Likewise, in order for a combination patent to be valid, the old elements which make up the machine must perform an additional and different function in combination than they perform out of it. In other words, the patented machine must exceed the sum of its parts, and there must be in such new or improved result the element of discovery—and the combination must produce some new or different function—one that has unusual or

surprising consequences. In this case the plaintiff does not claim that Bronaugh and Potter invented any new element. Every element in each claim is old in the art. These elements are a cabinet, [1497] a cooling compartment, a freezing compartment, thermal insulation, a cooling refrigerant expander, a freezing refrigerant expander, volatile refrigerant, a single liquefying unit, and a thermostat. Each of these elements is old in the art. Likewise, plaintiff does not claim that Bronaugh and Potter were the first to invent a household refrigerator with two or more compartments, one for the freezing of foods and the other for the cooling of foods, or moist cold refrigeration, or a non-frosting cooling compartment. These were also well known in the art at the time that Bronaugh and Potter applied for their original patent or conceived their invention. Plaintiff claims an invention solely on the basis of a combination.

In order to find that the machine described by Bronaugh and Potter constituted an invention, you must find that the elements in the claims were combined in a new combination which produced a result which had never previously been achieved and which was not within the exercise of mechanical skill of good mechanics or engineers skilled in the art of refrigeration. And, as I have previously told you, the total machine must exceed the sum of the parts; something new and surprising must have been achieved. Now, if you find that the patented structure meets this standard, then, of course, you will find invention; but if, on the other hand, you

find by clear and convincing evidence [1498] that this standard has not been met and that the various old elements in a new combination produce no new and surprising result or was within the skill of the art, no invention was present, and, of course, under those circumstances, you would find the patent to be invalid and hold for the defendants.

If an earlier patent discloses substantially the same things as the claims of a patent or that substantially the same thing was already in existence and known and used before one makes a discovery which is subsequently patented, that patent is said to be anticipated and, therefore, invalid. The questions of anticipation of a patent and of lack of invention in the same claim are closely related. They required a consideration of the same facts, and the instructions which I have heretofore given you concerning the burden of proof are equally applicable to both defenses.

In connection with the defense of anticipation, the defendants have cited certain prior art references, including Anderson, Lundgaard, Larkin, Davenport, and others. In connection with this defense, I now desire to lay down certain rules for you.

The presumption of validity and invention does not extend beyond the record before the examiners in the Patent Office. On the other hand, where the file wrapper [1499] discloses a patent was considered by the Patent Office during the prosecution of a claim for a patent and if certain claims were allowed the patentee, there is a presumption that

the Patent Office did find differences between the prior art patent or patents and the patent which is issued, in this case the patent in suit. This presumption, as I have previously stated, is merely a rule of evidence and casts the burden upon the alleged infringer to go forward with the evidence and prove by clear and convincing evidence that the Patent Office was wrong in distinguishing the prior art from the patent issued. Therefore, in this case, the fact that Anderson and Lundgaard and Davenport were considered by the Patent Office carried with it the presumption that the combination of elements in the Bronaugh and Potter patent constituted invention, and if this presumption is to be overcome, the defendants must show by clear and convincing evidence that there were no distinguishable features of a patentable character between Anderson or Lundgaard or Davenport and the patent in suit. With reference to prior art patents which were not considered by the Patent Office, such as Larkin, no such presumption exists.

Although the same evidence is available on the defense of anticipation and on the defense of no invention, the defense of anticipation is the narrower one, and even though a prior art reference may not fully anticipate a [1500] patent, the question is whether a mechanic or an engineer skilled in the refrigeration art, by applying Larkin and other prior art patents, might reasonably have been expected to have achieved the result described in the patented structure.

At the trial plaintiff introduced evidence in support of its contention that the patented invention filled a long-felt want and that it enjoyed commercial success or would have enjoyed commercial success but for manufacturing difficulties beyond the control of the inventors and those who owned the patents. But commercial success without invention will not make patentability. Evidence concerning commercial success is relevant where there is doubt that the patented structure meets the standards which I have laid down for you as to invention, and in such doubtful cases it is one element to be considered in determining whether the patentees actually made an invention. It was for this purpose, and this purpose alone, that I admitted evidence concerning commercial success. However, for commercial success to have any meaning, the success must have been due to the patented features of the device rather than other considerations, such as advertising, promotion, salesmanship, and other factors which are important in determining the success or failure of a product. Also, any commercial success must be public acceptance of the devices described in the patent, and not merely devices in the same general field. [1501]

It is admitted in this case that plaintiff's patent covers something more than merely a household refrigerator with a freezing compartment and a cooling compartment in the same box. This had been shown earlier by Anderson and perhaps others. Now, the law does not require a patentee to use

his patented invention or make, sell, or use the device covered by it. Therefore, even though a device may have been patented and known to those skilled in the art, it may not have been used, manufactured, or sold. Therefore, even though there may have been a widespread demand for two-temperature boxes, that, in and of itself, is not evidence of commercial success of the patented structure. You must find that the combination described in Potter and Bronaugh was a commercial success.

Patents for machines consist substantially of three parts. First, a drawing of the device; second, a specification, which is a verbal description of the device illustrated in the drawing; and, third, which is the most material part, the claims of the patent. It is the law that after a man has illustrated and described his device, he must particularly point out and distinctly claim the part, improvement or combination which he claims as his invention. He may show and describe many things in the drawings and specifications that he did not invent; but when it comes to the claims, he must there define or describe his exact [1502] invention so as clearly to distinguish it from what was old, that is, from what existed before his invention. The claims of the patent are the measure of the grant from the Government to the patentee. He cannot claim something which he does not show or describe; nor something which he did not invent. He can claim only the thing which he has invented and his claims must define that particular thing so that the public will

know what that thing is and be able to avoid infringing it.

The function of a patent claim is not merely to outline or to summarize what is shown and described, but rather to define the exact boundaries of the invention—that is, to determine with precision or to mark out clearly the boundaries or limits of the invention.

Neither the specification nor the drawings of a patent can be infringed; only the patent claims can be infringed.

Plaintiff relies on all four claims of its Reissue Patent 23058, and it asserts that all of such claims are valid and were infringed by the accused structures; that is, by the Admiral and Amana refrigerators.

It is conceded that Claim 2 is the broadest claim; that is, it is plaintiff's best claim. I shall, therefore, read it verbatim:

"2. A household refrigerator which in [1503] normal operation provides above-freezing moist cold air for preserving in a refrigerated condition foods susceptible to moisture loss by evaporation and below-freezing dry cold air and a dry cold surface for preserving foods in a frozen condition, said refrigerator comprising a cabinet having a cooling compartment and a freezing compartment, thermal insulation around said compartments thermally insulating said compartments from each other and from the outside atmosphere, a cooling refrigerant expander having heat-conducting surfaces within

said cooling compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature above 32° F. while withdrawing heat from said compartment, whereby air in said cooling compartment is cooled thereby to a temperature above 32° F. and is maintained at a humidity whose relative value is at least 100% at 32° F., a freezing refrigerant expander having heat-conducting surfaces within said freezing compartment and constructed and arranged to maintain its heat-conducting surfaces at a temperature well below 32° F. while withdrawing heat from said compartment whereby air in said freezing compartment is cooled thereby to a temperature well below 32° F., volatile refrigerant [1504] in said expanders, a single liquefying unit associated with said expanders and constructed and arranged to condense refrigerant expanded by heat extracted from both said compartments, the volatile refrigerant circulating through said expanders being the sole heat-extracting medium, and a thermostat responsive to the temperature in one of said compartments controlling the operation of said liquefying unit."

I might add here that that is called a description, and I merely want to say that all of the elements described in this claim are essential to the validity of the plaintiff's claim, and, as I shall tell you later, you must find that the accused structure has all of these elements, or the equivalent thereof, in order to find infringement.

Claim 1 is like Claim 2 except that air in each compartment is defined as an operating element of the combination.

Claim 4 is like Claim 2, except that it provides for greater thermal insulation around the freezing compartment than around the cooling compartment and a thermostat responsive to the temperature in the cooling compartments instead of either compartment.

And Claim 3 is the narrowest claim, since, in addition to all of the elements set forth in Claim 2, it [1505] provides for both air and differential thermal insulation.

You will have with you in the Jury Room a copy of this reissue patent, and you can check each of the claims for yourselves.

I have already instructed you at length on the question of anticipation and invention, but I want to correlate these and other defenses of the defendants with the precise claims that they are making in this case.

First, Defendants contend that the alleged invention set forth and claimed in the Letters Patent issued to Bronaugh and Potter had been shown, described and patented prior to the time that Bronaugh and Potter are alleged to have made their invention.

Second: That the patent in suit does not describe an invention, and the machine therein described, at most, represents an improvement that was obvious to anyone "skilled in the art."

I shall not instruct you any further on these two contentions because I have already instructed you

at great length concerning them. If you find that either or both of such contentions have been proved by clear and convincing evidence, your verdict must be in favor of the defendants.

Third: Defendants next contend that the specification in the reissue patent is not in such full, clear and concise terms as will enable a person "skilled in the art" [1506] to make and use the same. This contention relates to the alleged failure of the patentees to describe in the specification what was described as a fin coil or a brine tank.

The law provides:

"The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention."

I leave it to you to determine as a question of fact whether there was a disclosure in accordance with the law. If it clearly appears that there was no such disclosure in the specification, you must find the patent invalid.

The defendants next contend that the claims of the patent are vague, indefinite and ambiguous and do not point out and distinctly claim the subject matter which the patentees regard as their alleged invention.

The following is a statement of the applicable statute:

"The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

It is important that the claims define the particular thing claimed so that the public will know what that thing is and be able to avoid [1507] infringing it.

The monopoly of a patent is a valuable right. It permits the holder thereof to exact toll from all those who desire to use it. No such monopoly should be given to anyone unless the monopoly is specifically and definitely defined. When a patentee maintains that his invention resides in a new combination of old elements, the law requires that the combination claims should be scrutinized with the care proportioned to the difficulty and improbability of finding invention in an assembly of old elements. When a patentee has added nothing to the total stock of knowledge, but merely brings together segments of prior art and claims them in congregation as a monopoly, the patent is invalid. As I told you before, a combination to be valid must produce some new or different function—one that has unusual or surprising consequences.

You will have with you in the jury room each of the four claims of the reissue patent. You can examine them, yourselves, in the light of the testimony given by the two patent experts, Mr. Norman

Parker for the plaintiff and Mr. Glenn Muffly for the defendants. As you will recall, they are in sharp disagreement as to the meaning of the patent claims, and it will be for you to determine from all of the evidence whether the patent claims distinctly set out the matters which the patentees regard as their invention.

If it clearly appears that all four claims [1508] do not meet the statutory standard, then, of course, you would find the patent invalid. However, the mere fact that you find one of such claims does not meet the standard does not necessarily mean that the other claims are likewise deficient. Each claim must be considered separately. Only such claims as do not meet the statutory standard are invalid.

I remind you that each of these contentions asserted by the defendants is to be separately considered and decided by you upon all the evidence in the case, bearing in mind that the burden rests upon the defendants to establish one or more of these contentions by clear and convincing evidence. And if the defendants fail to sustain this burden as to any of them, of course, you must find all the claims valid; but, if on the other hand, you find that the defendants have established one or more of such contentions by clear and convincing evidence, the patent would be invalid, and your verdict must be in favor of the defendants. It may be that the claimed invalidity might not affect all of the claims of the patent, and if so, only such claims as are affected would be invalid.

I will submit to you a number of interrogatories

in connection with the issue of validity, and you should answer all of them in accordance with these instructions. However, I will go over the questions with you in detail [1509] and will instruct you further at that time.

If you find in favor of the defendants on the question of validity—that is, if you find that all claims are invalid—your deliberations will be at an end, and you will bring in a verdict in favor of the defendants. However, in addition to the general verdict that will be submitted to you, please answer the interrogatories relating to the question of validity.

If you find that one or more claims in the patent in suit is valid, you will then consider the question of infringement.

Infringement is to be found when the accused structures accomplish substantially the same result by substantially the same means as does the patented invention. Or, stated differently, in order for there to be infringement you must find that there is identity of structure, identity of function and identity of result between the accused refrigerators and the claims of the patent in suit. By this is meant that the construction of the parts of the accused refrigerators, the way in which they operate, and the result achieved by this operation is substantially identical with that of the patent.

Plaintiff must show that the defendants' refrigerators embodied all of the elements included in one or more of the claims; that those elements in the accused [1510] refrigerator acted or operated in

substantially the same manner as the elements in the patent claims to produce substantially the results claimed. If you find that the defendants' refrigerators contained different elements from the device described by the patent claims or that the elements or parts of the defendants' refrigerators acted together in a different manner, or that the results claimed for the device of patents were not attained by the defendants' refrigerators, then you should find for the defendants on the question of infringement.

Of course, I need not tell you that only valid patents can be infringed, and if you come to the conclusion that the claims of the patent in suit are invalid, there could be no infringement regardless of how close the accused structures resemble the claims in the patent.

On the question of infringement, the plaintiff has the burden of proof, and it must prove by a preponderance of the evidence that the accused structures infringed one or more claims of the plaintiff's patent. Let me emphasize the word "claims." The plaintiff must show by a preponderance of the evidence that the refrigerators sold by the defendants were constructed not in accordance with the refrigerators sold by the Potter Refrigerator Company nor in accordance with the devices shown or described in their patent, but in accordance with the claims of the patent. In other [1511] words, you can only infringe patent claims.

Now the defendants contend that there are substantial differences between the accused structure

and the claims of plaintiff's patent. Before taking up these specific claims, I desire to point out that in connection with the question of infringement the jury may look to the operations of the accused structures in the light of what is done and how it is done. Variances which are insubstantial or sham, which do not prevent the accused operations from being in essence of that of the patent, do not avoid infringement.

This is another way of saying that the accused structures must substantially accomplish the same result by substantially the same means as does the patented invention. In patent law, the interpretation of the word "substantially" depends upon the character of the invention involved. If the invention is a pioneer one, the word "substantially" has a broad meaning, but if the invention is a minor or narrow one, the word "substantially" means practically "identical." In patent law, this is known as the range of equivalents.

Where a patentee has made a substantial advance in the art, he is entitled to a broad and liberal range of equivalents. But where the art is close; that is, where the thing invented is not of a pioneer character but is [1512] merely a narrow improvement of a known machine or art, then the patentee is only entitled to a narrow range of equivalents. In other words, when the range of equivalents to which a patentee is entitled is narrow, the accused structures must be practically identical to the claims of the patent.

There was testimony that the Bronaugh and Potter patent was a long stride in the refrigerator art, and on the other hand, there was testimony that at the time of the alleged Bronaugh and Potter invention, there were in excess of 40,000 patents relating to electric refrigeration on file in the United States Patent Office.

As you know from the arguments and the previous instructions, all of the elements in the claims in the patent in suit are old in the art. Plaintiff does not contend that Bronaugh and Potter invented a two-temperature refrigerator, one with freezing compartment and the other a cooling compartment standing alone, nor does it claim that Bronaugh and Potter invented moist cold or a non-frosting coil. In view of such facts, and the histories of the original patent and the reissue patent as disclosed in the file wrappers, I leave it to you to determine whether this is a pioneer patent entitled to a wide range or equivalents or a narrow improvement in a crowded field entitled to a very narrow range of equivalents.

As I said before, the defendants contend that even [151:] if Bronaugh and Potter reissue patent is valid, there is no infringement because there are essential differences between the accused structures and the claims of the patent in suit:

First: Defendants contend that all of the claims call for cooling coils within the cooling compartment and that in the accused refrigerators the cooling coils are outside the cooling compartment.

Second: Defendants further contend that all claims call for freezing coils within the freezing compartment, and in the accused refrigerators the freezing coils are outside the freezing compartment.

These are not in the exact words of the claims, but by referring to the claims you can get the exact words.

Your determination of these two contentions is dependent upon whether you find that the word "compartment" refers solely to the portion of the refrigerator in which the food is stored or whether it includes the frame and the portion of the refrigerator within the insulation. On this issue there is a sharp conflict between the experts. There was evidence of a later Potter patent introduced to show what Potter and Bronaugh meant by the term "compartment," but your determination of the meaning of the word "compartment" is not the interpretation of that word by Potter in the latter patent, but what the word "compartment" would mean to a person "skilled in the art" after examining the drawings and the specifications of the patent in suit. Therefore, [1511] what Potter and Bronaugh disclosed in the patent in suit is important, and you should look to the drawings and the description to determine if you can what Bronaugh and Potter describe as the compartment in the patent in suit. The cooling compartment is designated 14, and the freezing compartment 12 and 13.

Third: Defendants contend that all of the claims of the patent call for a single liquefying unit but

in the accused structure there are two liquefying units.

Fourth: All of the claims call for a volatile refrigerant in the coils. In the accused refrigerators there are two separate and distinct volatile refrigerants, each flowing through separate and distinct circuits.

You will recall the testimony that in the accused structures, there is one liquefying unit for the cooling compartment and another liquefying unit for the freezing compartment, each of which is in a separate circuit, and that the liquid in each circuit does not intermingle with each other. However, there are two plates between these two circuits, which permit heat to flow from one circuit to the other.

Now the plaintiff contends that this arrangement in the accused structure is merely an improvement of the single circuit shown in Bronaugh and Potter, but that such improvement embodies all of the essential features of the claims of Bronaugh and Potter and is the full equivalent thereof. [1515]

I leave it to you to determine whether, in the light of the instructions I have heretofore given you, the arrangement in the accused structure is the full equivalent of the single liquefying unit and volatile refrigerant in the patent claims.

I also call your attention to the fact that the defendants claim that this type of primary and secondary circuit used in the accused structures

follow the Gibson patent, which is owned by the Frigidaire Division of the General Motors Corporation and to which defendants pay royalties. This fact, and this fact alone, would not exonerate the defendants if you find that these circuits were the full equivalent of the structures claimed in Bronaugh and Potter, but it is evidence for you to consider on the question of infringement.

If plaintiff fails to prove by a preponderance of the evidence that the organization of these two circuits in the accused structure is the full equivalent of the claims of Bronaugh and Potter, you will find that the accused structures do not infringe the claims of Bronaugh and Potter, and you will find for the defendants.

Defendants, as their fifth and final contention, allege that the accused structures are of the type commonly known as the "cold wall refrigerators" as distinguished from the structures described in the patent in suit which are of [1516] the type commonly known as the "finned coil refrigerators," and that there are essential differences between these two types of household refrigerators. The plaintiff asserts that in essence the cold wall refrigerator is merely an extension of the finned coil and is the full equivalent thereof. In the light of the instructions I have given you with reference to range of equivalents, I leave it to you to determine whether that is or is not true.

As I previously told you, each element described in the claims in the patent in suit are essential and in order to find infringement you must find that

the accused structures contain all of such elements or their equivalents. If you find that the accused structures do not contain one or more of such elements or their equivalents, you must find that the accused structures do not infringe the claims of the patent in suit, and your verdict must be for the defendants regardless of whether the patent is or is not valid.

If you find that the accused structures do not infringe the claims of the patent in suit, your deliberations will be at an end, and you will return a verdict in favor of the defendants. However, if you find that one or more claims of the patent in suit is valid and if you find that the accused structure infringed the claims of plaintiff's patent, then you will consider the question of damages. The mere fact [1517] that I am instructing you on the question of damages does not mean that I am or am not of the opinion that the patent is valid or that the claims have or have not been infringed. On those issues I am expressing no opinion.

Damages, like any other proposition, must be proved by a preponderance of the evidence upon the part of the party making the claim, and plaintiff being the claimant has the burden of proof on this issue. The amount to which you find plaintiff is entitled, if you find it is entitled to damages, must not be based on speculation or conjecture. It must be reached and founded upon an unprejudiced consideration of all the facts in the case and without any sympathy or prejudice or a desire to punish anyone and without any thought of plain-

tiff's financial condition or the defendants' ability to pay.

The damages to which plaintiff is entitled are to be determined on the basis of what would be a reasonable royalty for the use of its patent, and by applying that royalty rate to those refrigerators manufactured by the defendants which infringed the claims of plaintiff's patent.

A reasonable royalty is an amount which a patent owner, willing but not compelled to grant a license, would accept, and which a person desiring to manufacture and sell the patented article as a business proposition, but not compelled to acquire a license, would be willing to pay as royalty in the expectation of being able to make and sell the patented article in the market at a reasonable profit. [1518]

You have heard the testimony of Mr. Parker, a patent expert, in response to a hypothetical question as to what would be a reasonable royalty under the patent in suit. His conclusion was based upon the assumption that all of the facts contained in the hypothetical question were true. If you should find from the evidence that the facts assumed as to any one of these elements in the hypothetical question were not true, you may disregard the answer to such question.

There was also introduced in evidence licensing agreements between Admiral Corporation and General Motors Corporation covering the Gibson patent and similar patents. You may consider these licensing agreements, as well as the other licensing agree-

ments introduced in evidence, in addition to the other testimony concerning the character of the invention, to determine reasonable royalty.

A pioneer patent would be entitled to a greater royalty than a narrow patent in a crowded field. The earnings in the industry, the profitableness of the patented device and all of the other facts introduced in evidence may be considered by you in determining reasonable royalty.

There will be submitted to you a general verdict and a special verdict. If you find in favor of the plaintiff, you will use the general verdict which reads as follows:

"We, the jury, find our verdict in favor of [1519] the plaintiff, Moist Cold Refrigerator Co., Inc., and against the defendants, and assess plaintiff's damages against the Admiral Corporation at $..... and assess damages against the Amana Refrigeration, Inc., at $.....

"Dated this .... day of December, 1955.

.....

"Foreman."

In the Federal Court all verdicts must be unanimous. Therefore, before you can return a verdict in favor of the plaintiff, each person on the jury must agree, first, that one or more claims of plaintiff's patent is valid; second, that such claim or claims have been infringed by the accused structures of the defendants; and that the plaintiff suffered damage thereby.

On the question of damages, each juror must agree that the amount allowed is proper. If you come to the question of damages, please remember that the jury is not permitted to strike an average from the amount which each juror believes that plaintiff should receive; in other words, you may not agree in advance that the total amount of the sum which each juror believes plaintiff is entitled from a particular defendant, divided by 12, shall be the verdict of the jury. Neither shall the verdict be determined by any other mechanical means. Of course, if you get to the [1520] question of damages, you must discuss it fully, just as you do every other phase of the case, and on the basis of your discussion arrive at a figure which is satisfactory to each juror—but don't do it by agreeing in advance to add the amounts each juror feels plaintiff is entitled and then dividing the total by 12.

If, on the other hand, you find in favor of the defendants, you will return the following verdict:

"We, the jury, find our verdict in favor of the defendants, and each of them, and against the plaintiff.

"Dated this . . . day of December, 1955.

. . . . . ,

"Foreman."

The verdict, whether for the plaintiff or the defendant, is signed only by the foreman and, therefore, I want to caution the foreman, whoever he or she may be, that the verdict represents the unani-

mous opinion of each of the jurors whether it be either for the plaintiff or the defendants.

Now, in addition to the general verdict, at the request of both parties, special interrogatories are being submitted to you.

The first of these interrogatories, under the title of validity, reads as follows: [1521]

"A. Does the claimed combination of elements (part) in the Bronaugh and Potter reissue patent produce some new and different function, one that has unusual or surprising consequences?

I have already fully instructed you on what constitutes invention, and this interrogatory is directed to that question.

The second interrogatory reads as follows:

"Q. Did Bronaugh and Potter make any invention over the Anderson patent?"

In connection with your consideration of this question, you shall consider two things: First, anticipation. Did Anderson fully anticipate Bronaugh and Potter? If it did, your answer should be "No." Likewise, if the differences between Anderson and Bronaugh and Potter are such as would have been obvious at the time the invention was made, to a person skilled in the refrigeration art, your answer should likewise be "No." Your answer to this interrogatory should be "Yes" if you find that Bronaugh and Potter made some discovery of a patentable character. Please remember that in this and other interrogatories relating to validity, the plain-

tiff has the advantage of the presumption of validity, and the defendants must show invalidity by clear and convincing evidence.

The third interrogatory reads as follows:

"Did Bronaugh and Potter make any [1522] invention over what is shown in the Anderson patent plus the Larkin patent?"

Anderson, you will recall, disclosed a two-temperature refrigerator, and Larkin disclosed a finned coil. As I explained to you previously, it is proper to look to the entire prior art. To determine invention and the mere fact that some of the elements of a combination claim are found in one prior art patent and other elements are found in another does not render it ineffective as a guide for ascertaining novelty. There still remains the all-important question as to whether the combining of such old elements amounts to patentable invention or whether it might be reasonably expected of one skilled in the art.

The next question refers to the validity or invalidity of each claim in the patent. I have already told you that Claim 2 is the broadest, and I have explained the differences between Claim 2 and the other claims. This interrogatory reads:

"Do you find the following claims to be vague, indefinite, or ambiguous?"

Then there is Claim 1 and you are supposed to answer that "Yes" or "No"; and the same for 2, 3 and 4.

Now, I am going to make a comment on this. There hasn't been very much evidence as to specific claims. Most of the evidence that has been

introduced is either that [1523] all the claims are valid or all the claims are invalid. Frankly, I don't know how you could answer one of these questions from the other and, therefore, it seems to me that if you find that the patent is valid you will find all the claims valid but if you find that the patent is invalid you will find all of the claims invalid.

Does anybody have any objections to that statement? Mr. Cuningham, do you have any objection to that statement?

Mr. Cuningham: Yes, your Honor.

The Court: All right. Well, then, I will withdraw the statement and you can look at each claim. You might find one valid and the other invalid.

The next group of questions relate to infringement. The first one reads:

"Do defendants' refrigerators have a cooling refrigerant expander (coil with or without extended surfaces) having surfaces within the cooling compartment?"

I have added after the word "expander" the words, "Coils with or without extended surfaces," because in my view a refrigerant expander is the same as a coil. You will recall the testimony and also my instructions concerning the meaning of the words "cooling compartment," and you will answer this question "Yes" or "No" depending upon whether you find that the cooling compartment is solely the space in which food is stored or [1524] is the structure within the insulation.

The next question reads as follows:

"Do the defendants' refrigerators have only a single liquefying unit associated with refrigerant expanders (coils with or without extended surfaces) and constructed and arranged to condense refrigerant expanded by heat extracted from both the compartments?"

Here again it is my view that the refrigerant expanders refer to coils, either with or without extended surfaces. I have already instructed you on the basis upon which you shall determine this question. Therefore, I shall not repeat these instructions.

After all of these questions have been answered, it should be signed by the foreman. I desire to point out that if you find in favor of the defendants on the question of validity, you need not answer the questions relating to infringement. However, you may do so if you desire, and if it is early enough I hope you will.

Again, I desire to express my deep appreciation to each member of the jury for the careful attention you have paid to the evidence, the arguments of counsel, and now to my instructions. The case will be submitted to you within the next few minutes, but before that time, there is a legal matter that I desire to take up with the attorneys for the respective parties in chambers.

(Conclusion of Instructions to Jury.) [1525]

EXCEPTIONS TO INSTRUCTIONS OF THE COURT

(The following proceedings were had in the Court's chambers out of the presence of the jury.)

The Court: Under our Rules the person taking an exception must essentially set out the part which he regarded as offensive or point out the failure of the Court to have given an exception. Go ahead, with that in mind.

Mr. Cuningham: Well, if your Honor please—and I merely took notes as I heard the instructions given—my notes, however, do indicate that in your discussion of the Seventh Circuit Court of Appeals decision you said that patent as distinguished from the claim—you didn't say as distinguished; you said the patent was—original patent—was held invalid. I think that would be rendered unobjectionable if it were amplified to point out that it was the form of the claim that resulted in holding the patent invalid and not any invalidity in view of the state of the art or for application.

I understand that to be correct and I feel that the jury could reasonably and logically draw an erroneous conclusion from that description of the holding.

The Court: Well, Mr. Cuningham, I subsequently told them that the owners of the patent went back to the Patent Office and by making certain corrections were reissued the [1526] patent.

Mr. Cheatham: Your Honor, may I state that I

had more time to think about these when we were drafting them not in Mr. Cuningham's presence and I would like to have him take up with me any point to see if I can tell him where the same thing has been recovered.

The Court: I think, as a matter of law, however, that the Court did declare the patent to be invalid. Isn't that the only thing they can do? If the claims were improperly set up, they declare the patent invalid.

Mr. Cuningham: Declare the claims invalid technically. I think your Honor used the word "patent."

The Court: Go ahead.

Mr. Cuningham: May I mention one more? This is perhaps an oversight. Your Honor did quote, and, correctly, I think, Section 112 of the Act down to but not including the last paragraph thereof. Of course——

The Court: That was left out with Mr. Cheatham's consent. He agreed to it.

Mr. Cheatham: I did, your Honor.

Mr. Cuningham: But, your Honor, the point is this: I don't know whether he agreed to this. I don't know how he could. You immediately followed the quotation omitting that paragraph with reference to the language of the A. & P.T. Company case as to the improbability of finding invention [1527] in a combination of old elements. Now, this, it seems to me—we are certainly entitled to have a statement as to the full statute that governs here.

The Court: I dictated it and then we decided that it wasn't——

Mr. Kolisch: That has to do with the functionality.

The Court: Yes; functionality.

Mr. Cuningham: Functionality and vagueness are identical.

The Court: The point was that by reason of the withdrawal yesterday of any claim of functionality——

Mr. Cuningham: Withdrawal of vagueness. And I think it is all right, but I think you have got too much vagueness in this case—claim of vagueness to omit that. And functionality is no more than vagueness. And that is without my consent.

The Court: You want the following portion included: "An element in a claim for a combination may be expressed as a means or a step for performing a specified function without the recital of structure, material or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material or acts, described in the specification and equivalents thereof."

Mr. Cuningham: Yes, your Honor.

The Court: I am going to reject your request, not [1528] because it was what Mr. Cheatham said yesterday but solely because of the fact that I think it is immaterial in view of the withdrawal of the claim of functionality.

Mr. Cuningham: And I have one or two other things. I note an objection in various places—I am not able at the moment to identify them—but simply

from my notes the word "surprising," "surprising results."

The Court: You may have an exception to the use of those words.

Mr. Cuningham: May I limit it, your Honor, because I don't mean every use of "surprising," but it is where you stated——

The Court: As one of the requirements for invention.

Mr. Cuningham: As a requirement for there being patentable invention in a combination and that there must be unusual and surprising results.

The Court: You may have an exception to that. I used the word advisedly based upon my examination of the decisions from the Ninth Circuit.

Mr. Cuningham: Now, the other thing that I notice here—well, I haven't too clear a note on it—but I recall it and that was as I understood it and I could be wrong about this—but, as I understood your instructions, you did not approve piecemeal anticipation, that taking—combining in 1955 patents that were old in the art but were widely [1529] separated at the time as far as anticipation. But it seemed to me that your instructions wiped out that very well-established law against piecemeal anticipation in that you advised that you could look at more than one patent, and I believe there is a specific question which combines the admittedly prior art of the Anderson patent with the Larkin patent which is not, as I understand it, in the prior art and as we have contended and as we have requested

your Honor to differentiate in the requests for instructions.

The Court: I think you are a little in error there for this reason: I did give the instruction which you requested on anticipation, but on the question of invention I followed the Seventh Circuit. The language is practically taken verbatim from the Seventh Circuit decision which says that piecemeal anticipation, there is nothing wrong with it in determining the state of the art and you can look through all of the prior art patents and add one element from one and one from another to determine whether there was an invention. That was the thought I expressed in my instructions.

Mr. Cuningham: Then, lastly, your Honor, I note a total failure to give any instruction to the effect or to leave to the jury any question as to whether Gibson was later or earlier than the invention—dates of invention of the patent in suit. Now, a great deal of our record and many of our witnesses—five at least—have given evidence on [1530] this. I think that—and, of course, the same remarks apply in respect to the Potter—later Potter file wrapper.

The Court: Mr. Cuningham, I did that for your benefit. That was an advantage for you because I did not cite Gibson as anticipation but merely as a completely different line and then I went even further and said that even though they did follow Gibson it wouldn't be exonerating for them.

Mr. Cuningham: Mr. Cheatham tells me—I just

took notes as you were giving the instructions. However, that is all the notes, and I have finished.

The Court: All right. That is fine. I thought that that was a very favorable instruction to the plaintiff.

Mr. Cheatham, have you got any exceptions?

Mr. Cheatham: No, your Honor. Thank you.

The Court: Who is going to make the exceptions for the defendants?

Mr. Kolisch: We have no exceptions, your Honor. The only suggestion we would have would be the instruction that before you can find any of the claims to be valid you must first be satisfied that the patentees did make an invention and "I have previously instructed you on the meaning of the term."

The Court: I have told them that so many times. If they don't know that now, they will never know it.

I was a bit concerned about that [1531] interrogatory concerning validity of each claim. I did that specifically for the benefit of the plaintiff.

Mr. Cuningham: Your Honor, I think you did but, you see, the difficulty is these narrower claims like 3 and 4 are just clearly not met by Larkin combined with Anderson even though I think that combination is entirely improper.

(Whereupon the following proceedings were had in the courtroom in the presence of the jury.)

The Court: Ladies and Gentlemen of the jury, there are no changes that I desire to make in the instructions I have heretofore given you. As I told you before, the instructions which I gave will be transcribed and if you want them have the foreman notify Mr. Hart and they will be delivered to you.

There are one or two other things I would like to tell you. You will have the instructions, probably, because I saw a couple of you shake your heads "Yes," indicating you want the instructions. Now, I think that covers everything. But sometimes some of the jurors have an idea that they want to know something else, and under those circumstances you can notify Mr. Hart, but don't tell him anything other than that you have a question that you would like to have put. Don't tell him, "We are standing six to four," or something like that. It is none of his business [1532] how you stand. Don't ask him for any advice concerning the case. As far as food and drink—that is, water—we will see that you get that. But otherwise all of the communications are to be directed to me.

Now, it may very well be that your inquiry will not be answered because that will have to be done with the consent of both attorneys for the plaintiff and defendants. I think that you have all the instructions that you need to return a verdict and to answer the interrogatories. If the time comes that you want to look at the boxes themselves, arrangements will be made for the courtroom to be cleared

and you will have that opportunity. You just tell Mr. Hart. All other exhibits will be brought to the jury room for you.

(Whereupon the Crier was sworn.)

The Court: Now is the time for you to deliberate and the time has come when you can discuss this case with your fellow jurors to your hearts' content.

I want to talk to the two alternate jurors. Thank you very much for the patience which you have shown here today. You have been here every single day and we appreciate it. Under the law, however, only twelve people can deliberate, and you are now excused from further attendance at the trial.

(Thereupon the two alternate jurors were excused.)

(Whereupon the jury was excused and retired to their deliberation.) [1533]

(Court convened at 10:45 A.M. December 2, 1955, for the Court's consideration of the jury's question concerning interrogatories.)

The Court: Mr. Duyck, I have been advised that the jury has some problem or question concerning interrogatories, and it is for that reason that I assembled all the attorneys here because we would like to know what problem you are encountering with the interrogatories.

Mr. Duyck: Your Honor, these interrogatories are a thing, you might say, completely new to the members of the jury and we don't know their mean-

ing or their import. We are just too stupid to really ask questions about it. We would like to have explained to us what they are and why we have been presented with them.

The Court: Well, let me ask you one or two questions first. Aren't they clear?

Mr. Duyck: I think the interrogatories are concise.

The Court: Do you think they have hidden meanings or jokers in them?

Mr. Duyck: We don't understand why they have been presented to us.

The Court: All right. Well, under the law it is proper for a judge to submit to a jury either a general verdict or a special verdict. Now, many times in the Federal System [1534] only questions are propounded to a jury. Answer these Yes or No. There is no general verdict.

Now, in this particular case we submitted a general verdict, but in order to arrive at that general verdict you have to make certain decisions. In order to see what those decisions were, primarily for the benefit of the Court but also for the benefit of the litigants, we asked you certain specific questions. Now, there are no tricks, there are no hidden meanings in these things; they are just simple questions. For example, Question No. 2 or 3: "Did Bronaugh and Potter make any invention over what is shown in the Anderson patent plus Larkin patent?" You all know that Anderson had a two-temperature box. Larkin had invented the finned coil.

Mr. Duyck: Your Honor, may I interrupt? That

is the thing we run into in our mental block; we get: "Why does he want to know that?"

The Court: Well, I want to know because only by your being able to answer that question are you able to bring in a verdict either for the plaintiff or for the defendant. If you don't answer that question, you haven't made up your mind, really, of the basis of your decision. If you can't answer these questions, you are not entitled to bring in a general verdict because you haven't decided the case. Do I make myself clear now? [1535]

Mr. Duyck: I think you have made yourself very clear, your Honor.

The Court: Only by answering these questions, only by having an opinion on these questions can you honestly bring in a verdict. If you haven't resolved these questions, you are not ready to bring in a verdict.

Now, these things have to be decided. I should ask, although you haven't brought it up, Mr. Duyck, do you think an agreement can be obtained in this case?

Mr. Duyck: I think so. I think we have pretty well——

The Court: All right; that is enough. I just don't want to go any further on these things. Now, I think that practically every other question except the one I just gave to you or the statement or answer that I just gave you you can find the answers in the instructions and I think probably you have referred to that considerably. Now, if there is anything else you want to know, let me know.

Mr. Duyck: I think, your Honor, that that clears up the situation.

The Court: All right. Fine.

This has been a long case. I know there are a lot of problems, and I know how conscientious you are, so don't worry about disturbing me or any of the attorneys. If you have a question, you let me know and I will get the attorneys up here and we will answer your question if we possibly can. [1536]

You are excused now.

(Whereupon the jury retired to continue their deliberation.)

[Endorsed]: Filed March 16, 1956. [1537]

TRANSCRIPT OF PROCEEDINGS IN RE: DEFENDANTS' MOTIONS FOR DIRECTED VERDICT AND FOR JUDGMENT NOTWITHSTANDING THE VERDICT

Mr. Cheatham: May it please the Court, I would like to enter the appearance of Mr. Hugh L. Biggs on behalf of Plaintiff in this action.

The Court: We are always glad to have Mr. Biggs sit in this court.

Mr. Biggs: Thank you, your Honor.

The Court: Mr. Kolisch?

Mr. Kolisch: Your Honor, I would like to hand up to your Honor Defendants' Motion for Judgment Notwithstanding the Verdict and a memorandum of law, a short memorandum of law in support

of this motion. Copies of these papers were served on plaintiff on Saturday morning.

The Court: Proceed.

Mr. Kolisch: The basis for this motion is that the jury disregarded the Court's instructions and returned a verdict which ~~is completely~~ unsupported by the evidence ~~and does~~ not conform to the applicable law.

I think at the outset it would be well if the Court were to listen to a short portion of its own instructions.

The Court: Mr. Kolisch, you do not have to read my instructions to me. I have read them very carefully, and [2*] I have read all the cases which you cited over the week end, except perhaps McCroskey v. Braun, 107 Fed. (2d) 143.

We will hear from the other side.

Mr. Cuningham: May it please the Court, we have handed up in this elaborate binding a memorandum in opposition. I would like to stand on the memorandum for the details. Copies of that have been served today on my friends on the other side.

The position spelled out, if your Honor please, with some care and some particularity in the document, that is, the second document in the binder and which is labeled "Plaintiff's Memorandum in Opposition to Defendants' Motion Notwithstanding," takes up seriatum each of the points under the three chief headings, mainly alleged invalidity, noninfringement, and excessive amount of verdict. The effort has been throughout to cite chapter and verse

*Page numbering appearing at top of page of original Reporter's Transcript of Record.

for the record to show where there is ample basis in the record before this Court supporting the verdicts of the jury in all respects. I think I could do no better than to rely upon the statement. I am not trying to duck any argument, but it seems to me that what argument I would make would be, at best, a paraphrase and not as good a one as the brief upon which we now rely. Would that be satisfactory to your Honor?

The Court: It would be perfectly satisfactory with me. I know how I am going to decide this motion. I have read [3] the testimony, and I have read my instructions. I do not believe any useful purpose will be served to delay my decision on the motions for a directed verdict and for judgment notwithstanding the verdict.

I am of the opinion that the motions must be granted. I am also of the opinion that even assuming validity and infringement there is no rational basis for the amount of the verdicts that were rendered against defendants Admiral Corporation and Amana Refrigeration, Inc., or either of them.

Both before and during the trial I informed counsel that I wanted to submit this case to the jury because it had been pending for a long time. It had already been to the Court of Appeals once, and the expenses incurred by both sides were great. In addition to numerous depositions of witnesses residing in the East and South, there were a number of lay and expert witnesses from various parts of the United States, and out-of-town counsel were here for many weeks even before the trial.

At the conclusion of the plaintiff's case in chief I seriously considered directing a verdict in favor of the defendants because from the testimony and the exhibits, particularly the prior art patents, it did not appear to me that the plaintiff's patented device had met the rigid standards of invention laid down in Berkeley [4] Pump Co. v. Jacuzzi Bros., 214 F. (2d) 785 (C.C.A. 9th, 1954); Kwikset Locks v. Hillgren, 210 F. (2d) 483 (C.C.A. 9th, 1954); and in numerous other decisions from our own Circuit as well as from the United States Supreme Court, involving the "assembling (of) old elements, the previous functional operations of which are not changed by their arrangement and inclusion in the device."

The patent in suit involves improvement in an household refrigerator. Each element in the alleged combination was old in the art. They consist of a cabinet, a cooling compartment, a freezing compartment, thermal insulation, a cooling refrigerant expander, a freezing refrigerant expander, volatile refrigerant, a single liquefying unit, and a thermostat. All of these elements, when combined together —and I am not using the word "combined" as a word of art—acted as they had acted in the past, and the end result did not exceed the sum of its parts. Or, stated differently, the old elements making up the device did not perform an additional and different function than they performed out of it.

I was also of the opinion that the alleged combination of the patent in suit "did not perform some

new and different function—one that has unusual or surprising consequences."

The patent in suit consisted of a household [5] refrigerator having a separate freezing compartment and a separate cooling compartment operated by a single liquefying unit with the cooling compartment having a humid temperature, or moist cold, and with a non-frosting coil in the cooling compartment.

I, therefore, came to the conclusion that even if Anderson or some other prior art patent had not fully anticipated the patent in suit in every material part, it was nevertheless invalid because it did not meet the standards of invention as laid down in the decisions to which I have already referred.

I was also concerned about the fact that although it was conceded that the validity of the patent in suit is dependent upon the existence of a fin coil or other extended surface coil, such a coil was not disclosed in the specification. Plaintiff's expert testified that by looking at the drawing he could tell that a fin coil or a brine tank was described. He, therefore, contended that the failure to disclose the fin coil in the specification did not invalidate the patent. However, it appeared to me that the requirements of 35 U.S.C.A., Sec. 112, had not been met.

I likewise was in doubt as to whether the claims were sufficiently definite to satisfy the statute. In spite of such conclusions and doubts, I denied defendants' motion for a directed verdict at the end of plaintiff's case in [6] chief.

Thereafter, Mr. Glenn Muffly, defendants' refrig-

eration and patent expert, testified at great length concerning the validity of the plaintiff's patent in suit and also concerning infringement. The only information elicited from Mr. Muffly on cross-examination was that he regarded the Anderson patent as the closest to the patent in suit. Thereafter, Mr. Parker, plaintiff's expert, again resumed the stand and contradicted the testimony of Mr. Muffly with respect to certain conclusions about which he had testified.

When all of the evidence was in, the defendants again moved for a directed verdict on the same grounds which they had previously urged. Again, I seriously considered granting the motion because by that time it had appeared that, in addition to the patent being invalid, it had not been infringed.

There was no dispute about the structure of the accused devices. They were cold wall refrigerators as distinguished from the fin-type refrigerator which is exemplified in the patent in suit. Likewise, all of the claims of the patent in suit call for a single liquefying unit; in the accused structures there were two liquefying units, each of which had its own volatile refrigerant flowing through a separate and distinct circuit. [7]

Parenthetically, I might add that during the argument to the jury plaintiff's counsel stated that the use of a primary and secondary circuit in the accused structures was an improvement over the structure described in the patent in suit. I wondered at the time how he could establish identity of structure with this admission.

Although plaintiff's counsel denied that the doctrine of equivalents was applicable, the only basis I could discover upon which the jury might find identity of structure was in that doctrine. The jury, in answer to the special interrogatories, found them to be identical, a finding which in my opinion was proper only if the patent in suit was a pioneer one.

In spite of my added doubts concerning infringement, I decided to submit the whole case to the jury in the hope that another trial could be avoided. If I directed a verdict in favor of the defendants and the Court of Appeals held that I should have submitted it to the jury, then all of the time, trouble and expense incurred in this trial would have been wasted; but if I permitted the jury to make a determination and the jury found in favor of the plaintiff, I could then set aside the verdict and the Appellate Court would merely be presented with the questions of validity and infringement and could reinstate the verdict if they thought that I had erred. Unfortunately, the verdict of [8] the jury does not make this possible. As I stated previously, there is no rational basis for the amount of damages fixed by the jury.

Even if this patent is valid and infringed, it was a minor improvement in a crowded field, and in my view a royalty of 3 per cent on the selling price or 5 per cent on the manufacturer's price is completely out of line. In addition to a few licensing agreements, none of which showed such a high rate, the only other evidence was the testimony of Mr.

Parker based upon a hypothetical question, which assumed that the patent in suit was a pioneer patent or one that had made a long stride in the refrigeration art.

An examination of the file wrappers of the original patent, as well as the patent in suit, clearly showed that this was not the case.

I appreciate the fact that the jury made specific findings, which are contrary to those expressed in this opinion. In spite of my strong attachment to the right of trial by jury, I cannot avoid the responsibility which is mine merely because a jury found to the contrary.

Judge Bone, in Berkeley Pump Co. v. Jacuzzi Bros., 214 F. (2d) 785, beginning at Page 791, clearly sets out the obligation of a trial judge in cases in which "the jury has departed from the relevant legal criteria by [9] which either a jury or a judge must be guided in their or his fact-finding function."

I think that this jury listened carefully to the evidence and tried to render an honest and intelligent opinion. In spite of the attempts of plaintiff's counsel to inject prejudice into the case, I think he was unsuccessful, and I think that the action which I took during the trial and in my instructions to dissipate any such feeling was successful. However, I think that the fault lies in the manner in which the case was presented by the defendants.

At no time was the jury adequately informed of defendants' contentions. The jury, after listening

to defendants' opening statement, must have come to the conclusion that the defendants were trying to withhold information from them. The witnesses were examined by defendants' counsel not with the view of convincing a jury, but solely for the purpose of appealing to the Court. It was a highly technical presentation, and the closing argument of counsel for the defendants can only be characterized as fantastic. I did not understand the "frost, defrost" argument which took up a large portion of time consumed by the defendants, and I am sure that the jury did not have the vaguest idea of what counsel was talking about.

However, I cannot permit a judgment on liability [10] or a judgment on damages to stand where there is no basis therefor. Neither the good intentions of juries nor the ineptness of lawyers is an adequate substitute for evidence.

As an equitable defense, the defendants have raised the question of unclean hands. It may very well be that the manner in which this case is being financed is a violation of New York law. I am also concerned about the scores of people who, according to Mr. Potter, are now contributing and who over a period of years have contributed over a Million Dollars to him and his companies in connection with the prosecution of this patent and this litigation. However, I do not believe that these facts justify a holding of unclean hands.

I merely add that it was primarily because of

these people that I did not direct a verdict earlier.

Counsel for the defendants may submit an order in accordance with this oral opinion, which will be transcribed and included in the file of this case and in any transcript that is sent to the Court of Appeals so that the Court of Appeals will know the reasons which motivated me to enter a judgment in favor of the defendants.

That is my opinion and my ruling.

Mr. Cuningham: If your Honor please, in all deference, I do want to note on the record a serious objection to the statement contained in your Honor's opinion that I or anyone [11] on this side consciously endeavored to insert any prejudice in the case or did insert any prejudice in the case.

The Court: I have no reason to change any statement that I have made. I mentioned most of the things which I thought were prejudicial outside the presence of the jury. Only once did I call to the attention of the jury acts which I thought were prejudicial, and then I thought it was necessary because your remarks urgently required some action.

Mr. Cuningham: May I ask what those are, sir?

The Court: Mr. Cuningham, you are never satisfied with anything I ever say. In spite of the fact that I have tried time and again to be most generous with you and explain things to you in detail, no remarks of mine or no specificity on my part will ever convince you, and so I am not going to try this time.

I know that this case is going to be appealed to the Court of Appeals. It has always been my policy to co-operate in every way to see that a person gets a full and fair hearing before the Court of Appeals. I will make everything available to that Court which is within my power. I will give whatever extensions you need in order to adequately present your case. [12]

Mr. Kolisch: Defendants will submit an order in accordance with your opinion.

The Court: Very well.

Mr. Kolisch: Will it be necessary to have Findings of Fact and Conclusions?

The Court: No, I do not think that the Rules require it.

(Proceedings concluded.) [13]

[Title of District Court and Cause.]

United States of America,
District of Oregon—ss.

CERTIFICATE OF CLERK

I, R. DeMott, Clerk of the United States District Court for the District of Oregon, do hereby certify that the foregoing documents consisting of Complaint, Intervenor's Answer (Admiral Corporation); Intervenor's Answer (Amana Refrigera-

tion, Inc.); Order Allowing Amendment of Answers; Order to Amend Complaint; Order Amending Answers; Amended Answer; Final Pretrial Order; Supplemental and Amended Complaint; Motion for a Directed Verdict; Special Interrogatories to the Jury; Verdict; Defendants Motion Notwithstanding the Verdict; Judgment in Favor of Defendants and Order Granting New Trial; Opinion of the Court on Defendants' Motion for Directed Verdict and Motion for Judgment Notwithstanding the Verdict; Notice of Appeal; Bond for Costs on Appeal; Order Extending Time to Docket Appeal; Statement of Points on Which Appellant Intends to Rely on Appeal; Designation of Contents of Record on Appeal; Order Extending Time to Docket Appeal; Defendants' Designation of Additional Portions of the Record on Appeal; Amendment to Plaintiff's Designation of Contents of Record on Appeal; and Transcript of Docket Entries Constitute the Record on Appeal from a Judgment of Said Court in a Cause Therein Numbered Civil 6016, in which Moist Cold Refrigerator Co., Inc., an Oregon corporation is the plaintiff and appellant and Lou Johnson Co., Inc., an Oregon corporation, et al. are the defendants and appellees; that the said record has been prepared by me in accordance with the designations of contents of record on appeal filed by the appellant and the appellees, and in accordance with the rules of this Court.

I further certify that the cost of filing the notice of appeal, $5.00 has been paid by the appellant.

In testimony whereof I have hereunto set my hand and affixed the seal of said Court in Portland, in said District, this 2nd day of March, 1956.

[Seal] R. DE MOTT,
Clerk.

By /s/ F. L. BUCK,
Chief Deputy.

[Endorsed]: No. 15057. United States Court of Appeals for the Ninth Circuit. Moist Cold Refrigerator Co., Inc., a Corporation, Appellant, vs. Lou Johnson Co., Inc., a Corporation, Meier & Frank Company, Inc., a Corporation, Admiral Corporation, a Corporation, and Amana Refrigeration, Inc., a Corporation, Appellees. Transcript of Record. Appeal from the United States District Court for the District of Oregon.

Filed March 7, 1956.

/s/ PAUL P. O'BRIEN,
Clerk of the United States Court of Appeals for the Ninth District.

In the United States Court of Appeals
For the Ninth Circuit

Appeal No. 15057

On Appeal from the Decision of the United States District Court for the District of Oregon in Civil Action No. 6016

MOIST COLD REFRIGERATOR CO., INC., an Oregon Corporation,

Plaintiff-Appellant,

vs.

LOU JOHNSON CO., INC., an Oregon Corporation,

Defendant-Appellee,

and

MEIER & FRANK COMPANY, INC., an Oregon Corporation,

Defendant-Appellee,

and

ADMIRAL CORPORATION, a Delaware Corporation,

Defendant-Intervener-Appellee,

and

AMANA REFRIGERATION, INC., an Iowa Corporation,

Defendant-Intervener-Appellee.

STATEMENT OF POINTS ON APPEAL

Comes now the appellant, Moist Cold Refrigerator Co., Inc., and pursuant to the rules of this

Court, hereby adopts as its statement of points on appeal Statement of Points filed in the District Court on February 15, 1956, and designates the following parts of the record in this action to be material and to be printed.

BUCKHORN AND
CHEATHAM,

By /s/ KENNETH S. KLARQUIST,
Attorneys for
Plaintiff-Appellant.

Dated: March 8, 1956.

Affidavit of service by mail attached.

[Endorsed]: Filed March 9, 1956.

[Title of Court of Appeals and Cause.]

No. 15057

On Appeal from the Decision of the United States District Court for the District of Oregon in Civil Action No. 6016

DESIGNATION OF MATERIAL DOCUMENTARY EXHIBITS

Comes now appellant, Moist Cold Refrigerator Co., Inc., and pursuant to the rules of this Court, designates the following documentary exhibits to be material and asks that they be treated as physical exhibits to avoid the expense of reproduction of the same:

(a) Plaintiff's Exhibits 1, 2A, 2B, 3D, 3E, 3F, 3G, 3H, 3I, 3J, 3L, 3M, 3N, 3O, 3P, 3Q, 3R, 3S, 3T,

3U, 3LL-1 through -51, 3MM, 3NN, 3OO, 3PP, 3QQ, 3RR, 3SS, 3TT, 3UU, 3VV, 3WW, 3YY, 3AAA, 3BBB, 3CCC, 3DDD, 3EEE, 3EEE-1-2-3-4, 3GGG, 3KKK, 4A, 4B, 4C, 4D, 4AA, 4BB, 4CC-1 to and including -14, 4DD-1 to and including -11, 5A, 5B, 5C, 5D, 6T, 6U, 6V, 6W, 6X, 6Y, 6AA, 6DD, 6EE, 6FF, 6GG, 6HH, 6II, 6JJ, 6RR, 6SS, 6UU, 6XX, 6YY, 6ZZ, 6AAA, 6BBB-1-2-3, 6KKKK, 8A, 9A, 17, 19CC, 19S and 22.

(b) Defendants' Exhibits 105, 106, 107, 108, 109, 110, 111, 112, 113, 144M, 120A, 120B.

BUCKHORN AND
CHEATHAM,

By /s/ KENNETH S. KLARQUIST,
Attorneys for
Plaintiff-Appellant.

Dated: March 8, 1956.

Affidavit of service by mail attached.

[Endorsed]: Filed March 9, 1956.

[Title of Court of Appeals and Cause.]

COUNTERDESIGNATION OF MATERIAL EXHIBITS

Come now appellees pursuant to the rules of this Court and designate the following additional parts of the record as being material to the consideration of the appeal herein:

Plaintiff's Exhibits 16A and 16B.

Defendants' Exhibits 101, 102, 114A through

114L, 114N through 114R, 115, 116, 117, 117A, 118, 119A, 119B and 119C.

RAMSEY AND KOLISCH,

By /s/ J. PIERRE KOLISCH,

Attorneys for

Defendants-Appellees.

Dated: March 15, 1956.

Affidavit of service by mail attached.

[Endorsed]: Filed March 16, 1956.

[Title of District Court and Cause.]

COUNTERDESIGNATION OF RECORD FOR PRINTING

Come now appellees pursuant to the rules of this Court and designate the following additional parts of the record in accordance with Rule 7(7) of the rules of this Court:

Plaintiff's Exhibits 1 and 2A.

Defendants' Exhibits 105 through 113.

Item 5, appellant's designation of record for printing, should be corrected to paragraph 9(n).

RAMSEY AND KOLISCH,

By /s/ J. PIERRE KOLISCH,

Attorneys for

Defendants-Appellees.

Dated: March 15, 1956.

Affidavit of service by mail attached.

[Endorsed]: Filed March 16, 1956.